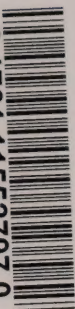


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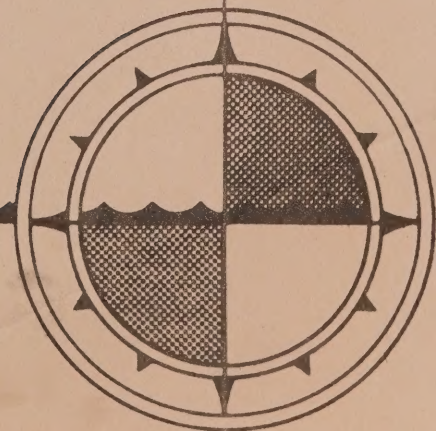
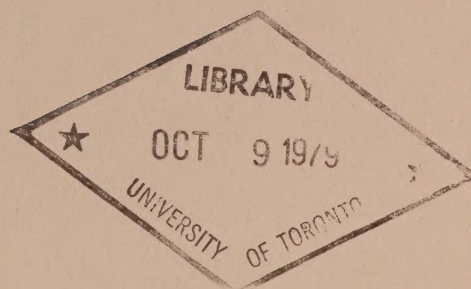




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**DATA REPORT OF STD OBSERVATIONS  
VOLUME 1:  
STRAIT OF JUAN DE FUCA  
1973**

**P.B. Crean  
W.S. Huggett  
M. Miyake**



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Sidney, B.C.**

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STRAIT OF JUAN DE FUCA

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Sidney, B.C.

1979

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This report was originally produced as University of British Columbia, Institute of Oceanography Manuscript Report 38 and 39 and was the joint effort of S. Huggett and P. Crean of the Institute of Ocean Sciences, Patricia Bay, and M. Miyake and A. Lewis of the University of British Columbia. This research effort was funded through NRC to M. Miyake and data analysis was funded by the Institute of Ocean Sciences.

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## Introduction

Estuarine exchanges between the waters of the inlets and coastal basins between Vancouver Island and the mainland coast and the adjacent north Pacific Ocean must occur through Juan de Fuca Strait to the south or to the north through Johnstone Strait. In the early part of 1973, current meter arrays were moored over a cross-section in each of these two straits for the purpose of obtaining information on the nature of these exchanges (Huggett et al. 1976a, b). The hydrographic data reported here were obtained during the period March-May, 1973, when these arrays were in position. These additional observations are required to assist in evaluating tides within the region, and further, to provide boundary conditions for an extension of these studies to include features of the estuarine circulation.

### Observation Program

The CSTD observations were made during the period 6 March - 18 April, 1973. The actual intervals of time over which the ship was available for this work were dependent on prior commitments to the laying and servicing of the current meters.

The two main objectives in these CSTD measurements concerned first, significant changes in the overall distribution of salinity and temperature along Juan de Fuca Strait during the period in question and second, changes at the semi-diurnal and the diurnal tidal frequencies in the distributions of these properties in the vicinity of the line of current meters.

The designation of station positions assigned in the cruise plan, together with their latitudes and longitudes, is shown in Table 1.

Stations JF1-8 inclusive (Fig. 3) provided data for the vertical longitudinal sections. This sequence of stations was occupied, though with occasional omissions, eight times in the course of the program.

The remaining STD sequences consist of time series measurements at either a single station, or close groupings of stations. Stations JF9, JF4 and JF10 (Fig. 4) were intended to provide data on changes in the cross-channel slopes over a vertical cross-section of isopycnal surfaces at the main tidal periods. These three stations were subsequently moved to locations JF11, JF12, JF13 because of concern over the strong seaward surface drift and possibility of the STD fouling a current meter mooring.

The stations lettered A,B,C,D and E,F,G,H respectively denote the time series patterns occupied simultaneously by the research vessels Parizeau of the Canadian Hydrographic Service, and the Onar of the University of Washington. The shift in Station A to the position A1 was to reduce steaming time for completion of each circuit of the pattern. The basic intention in this case was to obtain essentially three dimensional isopycnal surfaces at the main tidal periods in the vicinity of the line of current meters.

The relatively short pattern time series designated S1-5 inclusive (Fig. 5) was centrally located on the deepest part of the irregular sill that extends across the inner part of Juan de Fuca Strait.



### The Data

For the data presented, the CSTD measurements of temperature and salinity were regularly checked against water samples obtained. At the surface these samples were obtained by bucket. At depth an oceanographic sampling bottle and messenger were adapted for mounting on the CSTD cable immediately above the instrument. Straight lines fitted to the temperature and salinity differences respectively plotted as functions of depth, provided the corrections applied to the CSTD instruments (Fig. 3a, 3b, 4a, 4b).

The Bissett-Berman Model 9006 unit provided both an analog chart and digital magnetic tape records. Quantities derived from the corrected data were computed by the standard program in use at the Institute of Ocean Sciences, Patricia Bay. Data obtained from the Bissett-Berman Model 9060 were digitized from the chart records and then corrected. The abbreviations and units of the various quantities appearing in the record are as follows:

Depth	metres
Temp	°C
SAL	0/00
SIGMA T	Specific Gravity Anomaly
SVA	Specific Volume Anomaly
DETA D	Geopotential Anomaly (J/kg)
POT EN	Potential Energy in units of $10^8$ ergs/cm <sup>2</sup>
SOUND VELOCITY	m/sec

TABLE I

SHIP: PARIZEAU

CRUISE REFERENCE NUMBER 73- 7

FIRST CAST AT 73- 3- 5- 19.4 PST

LAST CAST AT 73- 4-18- 5.2 PST

STN.	LATITUDE	LONGITUDE	# OF CASTS
A	48-22.7 N	124-21.0 W	19
B	48-17.0 N	124-12.0 W	19
C	48-19.5 N	124-10.0 W	19
D	48-22.5 N	124- 7.8 W	18
JF1	48-22.2 N	124-46.2 W	4
JF10	48-22.2 N	124- 1.6 W	9
JF11	48-14.6 N	124- 5.0 W	9
JF12	48-17.2 N	124- 3.4 W	18
JF13	48-21.6 N	124- 0.7 W	9
JF2	48-25.8 N	124-31.9 W	8
JF3	48-21.7 N	124-18.3 W	9
JF4	48-17.7 N	124- 4.4 W	63
JF5	48-16.5 N	123-49.5 W	9
JF6	48-14.6 N	123-34.4 W	12
JF7	48-16.1 N	123-19.9 W	8
JF8	48-14.8 N	123- 5.3 W	8
JF9	48-15.0 N	124- 6.2 W	9
S1	48-14.2 N	123-26.8 W	4
S2	48-11.4 N	123-17.9 W	3
S3	48-14.2 N	123-18.0 W	6
S4	48-17.2 N	123-18.0 W	3
S5	48-14.4 N	123- 9.0 W	3



## LIST OF CONSECUTIVE CASTS

STN	YR	MO	DA	TIME (PST)	CCN	COMMENTS
JF1	73	3	6	3.4	1*	Longitudinal Section #1
JF1	73	3	6	3.8	2	
JF2	73	3	6	5.3	3*	
JF2	73	3	6	5.7	4	
JF3	73	3	6	6.9	5	
JF3	73	3	6	7.2	6	
JF4	73	3	6	8.7	7*	
JF5	73	3	6	9.7	8*	
JF6	73	3	6	10.7	9*	Time Series
JF6	73	3	6	11.0	10	
JF4	73	3	7	2.2	11*	
JF4	73	3	7	3.0	12	
JF4	73	3	7	3.4	13*	
JF4	73	3	7	4.6	14*	
JF4	73	3	7	6.9	15	
JF4	73	3	7	5.5	16*	
JF4	73	3	7	5.9	17	
JF4	73	3	7	6.7	18*	
JF4	73	3	7	7.0	19	
JF4	73	3	7	7.5	20*	
JF4	73	3	7	8.1	21	
JF4	73	3	7	8.6	22*	
JF4	73	3	7	9.0	23	
JF4	73	3	7	9.6	24*	
JF4	73	3	7	9.9	25	
JF4	73	3	7	10.9	26*	
JF4	73	3	7	11.2	27	
JF4	73	3	7	12.0	28	
JF4	73	3	7	12.6	29*	
JF4	73	3	7	13.0	30	
JF4	73	3	7	13.7	31*	
JF4	73	3	7	14.0	32	
JF1	73	3	8	3.4	33*	Longitudinal Section #2
JF1	73	3	8	4.0	34	
JF2	73	3	8	5.2	35*	
JF2	73	3	8	5.5	36	
JF3	73	3	8	6.8	37*	
JF3	73	3	8	7.2	38	
JF4	73	3	8	8.2	39*	
JF4	73	3	8	8.5	40	
JF5	73	3	8	9.5	41*	
JF5	73	3	8	9.8	42	
JF6	73	3	8	10.7	43*	
JF6	73	3	8	11.0	44	

JF7	73	3	8	11.9	45*
JF7	73	3	8	12.2	46
JF8	73	3	8	13.1	47*
JF8	73	3	8	13.5	48

JF8	73	3	12	18.0	49
JF7	73	3	12	19.2	50
JF6	73	3	12	20.1	51
JF5	73	3	12	21.2	52
JF4	73	3	12	22.2	53
JF3	73	3	12	23.7	54
JF2	73	3	13	1.5	55

Longitudinal  
Section  
#3

JF8	73	3	13	16.0	56
JF7	73	3	13	17.0	57
JF6	73	3	13	18.0	58
JF5	73	3	13	19.1	59
JF4	73	3	13	20.3	60
JF3	73	3	13	21.5	61
JF2	73	3	13	22.6	62

Longitudinal  
Section  
#4

JF4	73	3	14	0.7	63
JF10	73	3	14	1.5	64
JF4	73	3	14	2.2	65
JF9	73	3	14	2.7	66
JF4	73	3	14	3.3	67
JF10	73	3	14	3.9	68
JF4	73	3	14	4.5	69
JF9	73	3	14	5.5	70
JF4	73	3	14	6.5	71
JF10	73	3	14	7.5	72
JF4	73	3	14	9.0	73
JF9	73	3	14	9.7	74
JF4	73	3	14	10.6	75
JF10	73	3	14	11.7	76
JF4	73	3	14	12.5	77
JF9	73	3	14	13.5	78
JF4	73	3	14	14.5	79
JF10	73	3	14	7.5	80
JF4	73	3	14	16.5	81
JF9	73	3	14	17.5	82
JF4	73	3	14	19.0	83
JF10	73	3	14	19.5	84
JF4	73	3	14	20.6	85
JF9	73	3	14	21.6	86
JF4	73	3	14	22.5	87
JF10	73	3	14	23.6	88
JF4	73	3	15	0.5	89
JF9	73	3	15	1.5	90
JF4	73	3	15	2.5	91
JF10	73	3	15	3.5	92
JF4	73	3	15	4.5	93
JF9	73	3	15	5.5	94
JF4	73	3	15	6.5	95

Cross Sectional  
Time Series



JF10	73	3	15	7.5	96	
JF4	73	3	15	8.6	97	
JF9	73	3	15	9.7	98	
JF2	73	3	15	11.7	99	
JF3	73	3	15	12.8	100	
JF4	73	3	15	14.0	101	Longitudinal Section #5
JF5	73	3	15	15.2	102	
JF6	73	3	15	16.3	103	
JF7	73	3	15	17.3	104	
JF8	73	3	15	18.2	105	
JF4	73	3	15	23.2	106	
JF4	73	3	16	0.1	107	
JF4	73	3	16	1.2	108	
JF4	73	3	16	2.0	109	
JF4	73	3	16	3.0	110	
JF4	73	3	16	4.0	111	
JF4	73	3	16	5.0	112	
JF4	73	3	16	6.0	113	
JF4	73	3	16	7.0	114	Time Series
JF4	73	3	16	8.1	115	
JF4	73	3	16	9.1	116	
JF4	73	3	16	10.2	117	
JF4	73	3	16	11.2	118	
JF2	73	3	16	13.1	119	
JF3	73	3	16	14.1	120	
JF4	73	3	16	15.1	121	Longitudinal Section #6
JF5	73	3	16	16.1	122	
JF6	73	3	16	17.1	123	
JF7	73	3	16	18.1	124	
JF8	73	3	16	19.0	125	
JF8	73	3	19	21.9	126	
JF7	73	3	19	22.9	127	
JF6	73	3	19	23.9	128	Longitudinal Section #7
JF5	73	3	20	1.4	129	
JF4	73	3	20	2.5	130	
JF3	73	3	20	3.5	131	
	73	3	20	7.2	132	
	73	3	20	7.3	133	
						48°15.8' N 123°47.2' W
A	73	3	20	11.1	134	
B	73	3	20	12.0	135	
C	73	3	20	13.1	136	
D	73	3	20	14.1	137	
A	73	3	20	15.1	138	
B	73	3	20	16.0	139	
C	73	3	20	17.0	140	
D	73	3	20	18.0	141	
A	73	3	20	19.0	142	C.S.S. Parizeau and R.V. Onan Longitudinal and Cross-sectional Time Series
B	73	3	20	20.1	143	
C	73	3	20	21.1	144	

D	73	3	20	22.1	145
A	73	3	20	23.1	146
B	73	3	21	0.0	147
C	73	3	21	1.0	148
D	73	3	21	2.0	149
A	73	3	21	3.0	150
B	73	3	21	4.0	151
C	73	3	21	5.0	152
D	73	3	21	6.0	153
A	73	3	21	7.0	154
B	73	3	21	8.1	155
C	73	3	21	9.1	156
D	73	3	21	10.1	157
A	73	3	21	11.2	158
B	73	3	21	12.0	159
C	73	3	21	13.0	160
D	73	3	21	14.0	161
A	73	3	21	15.0	162
B	73	3	21	16.0	163
C	73	3	21	17.0	164
D	73	3	21	18.0	165
A	73	3	21	19.0	166
B	73	3	21	20.1	167
C	73	3	21	21.1	168
D	73	3	21	22.0	169
A	73	3	21	23.2	170
B	73	3	22	0.0	171
C	73	3	22	1.0	172
D	73	3	22	2.0	173
A	73	3	22	3.0	174
B	73	3	22	4.0	175
C	73	3	22	5.0	176
D	73	3	22	6.0	177
A	73	3	22	7.0	178
B	73	3	22	8.1	179
C	73	3	22	9.1	180
D	73	3	22	10.1	181
A	73	3	22	11.1	182
B	73	3	22	12.0	183
C	73	3	22	13.0	184
D	73	3	22	14.0	185
A	73	3	22	15.0	186
B	73	3	22	16.0	187
C	73	3	22	17.0	188
D	73	3	22	18.0	189
A	73	3	22	19.0	190
B	73	3	22	20.1	191
C	73	3	22	21.1	192
D	73	3	22	22.0	193
A	73	3	22	23.1	194
B	73	3	23	0.0	195
C	73	3	23	1.0	196
D	73	3	23	2.0	197
A	73	3	23	3.0	198

B	73	3	23	4.0	199
C	73	3	23	5.0	200
D	73	3	23	6.0	201
A	73	3	23	7.0	202
B	73	3	23	8.1	203
C	73	3	23	9.1	204
D	73	3	23	10.1	205
A	73	3	23	11.1	206
B	73	3	23	12.0	207
C	73	3	23	13.0	208

73	3	23	13.9	209
73	3	23	14.2	210
73	3	23	14.4	211

48°17.9' N  
124° 3.4' W

JF8	73	4	13	7.2	227
JF7	73	4	13	8.3	228
JF6	73	4	13	9.5	229
JF5	73	4	13	11.2	230
JF4	73	4	13	12.2	231

Longitudinal  
Section  
#8

JF13	73	4	14	3.5	232
JF12	73	4	14	4.2	233
JF12	73	4	14	4.7	234
JF11	73	4	14	5.4	235
JF12	73	4	14	6.0	236
JF13	73	4	14	6.5	237
JF12	73	4	14	7.2	238
JF11	73	4	14	7.7	239
JF12	73	4	14	8.1	240
JF13	73	4	14	8.7	241
JF12	73	4	14	9.4	242
JF11	73	4	14	10.2	243
JF12	73	4	14	10.7	244
JF13	73	4	14	11.3	245
JF12	73	4	14	11.9	246
JF11	73	4	14	12.6	247
JF12	73	4	14	13.2	248
	73	4	17	2.0	249
JF11	73	4	17	3.7	250
JF12	73	4	17	4.3	251
JF13	73	4	17	4.9	252
JF12	73	4	17	5.5	253
JF11	73	4	17	6.1	254
JF12	73	4	17	6.5	255
JF13	73	4	17	7.0	256
JF12	73	4	17	7.5	257
JF11	73	4	17	7.9	258
JF12	73	4	17	8.4	259
JF13	73	4	17	9.0	260
JF12	73	4	17	9.7	261
JF11	73	4	17	10.2	262
JF12	73	4	17	10.7	263

Cross-sectional  
time series  
48°16.0 N,  
124°9.4' W



JF13	73	4	17	11.2	264	
JF12	73	4	17	11.9	265	
JF11	73	4	17	12.3	266	
JF12	73	4	17	12.7	267	
JF13	73	4	17	13.2	268	
JF4	73	4	17	22.0	269	
JF6	73	4	18	2.8	270	
S1	73	4	18	3.4	271	
S2	73	4	18	4.2	272	
S3	73	4	18	4.6	273	
S4	73	4	18	5.0	274	
S5	73	4	18	5.8	275	
S3	73	4	18	6.4	276	
S1	73	4	18	7.0	277	
S2	73	4	18	7.7	278	Pattern time series
S3	73	4	18	8.0	279	
S4	73	4	18	8.5	280	
S5	73	4	18	9.1	281	
S3	73	4	18	9.6	282	
S1	73	4	18	10.2	283	
S2	73	4	18	10.9	284	
S3	73	4	18	11.4	285	
S4	73	4	18	11.8	286	
S5	73	4	18	12.5	287	
S3	73	4	18	13.2	288	
S1	73	4	18	13.9	289	
JF6	73	4	18	14.7	290	

N.B. \* denotes costs using a Bissett Benman  
Model 9060 CSTD.

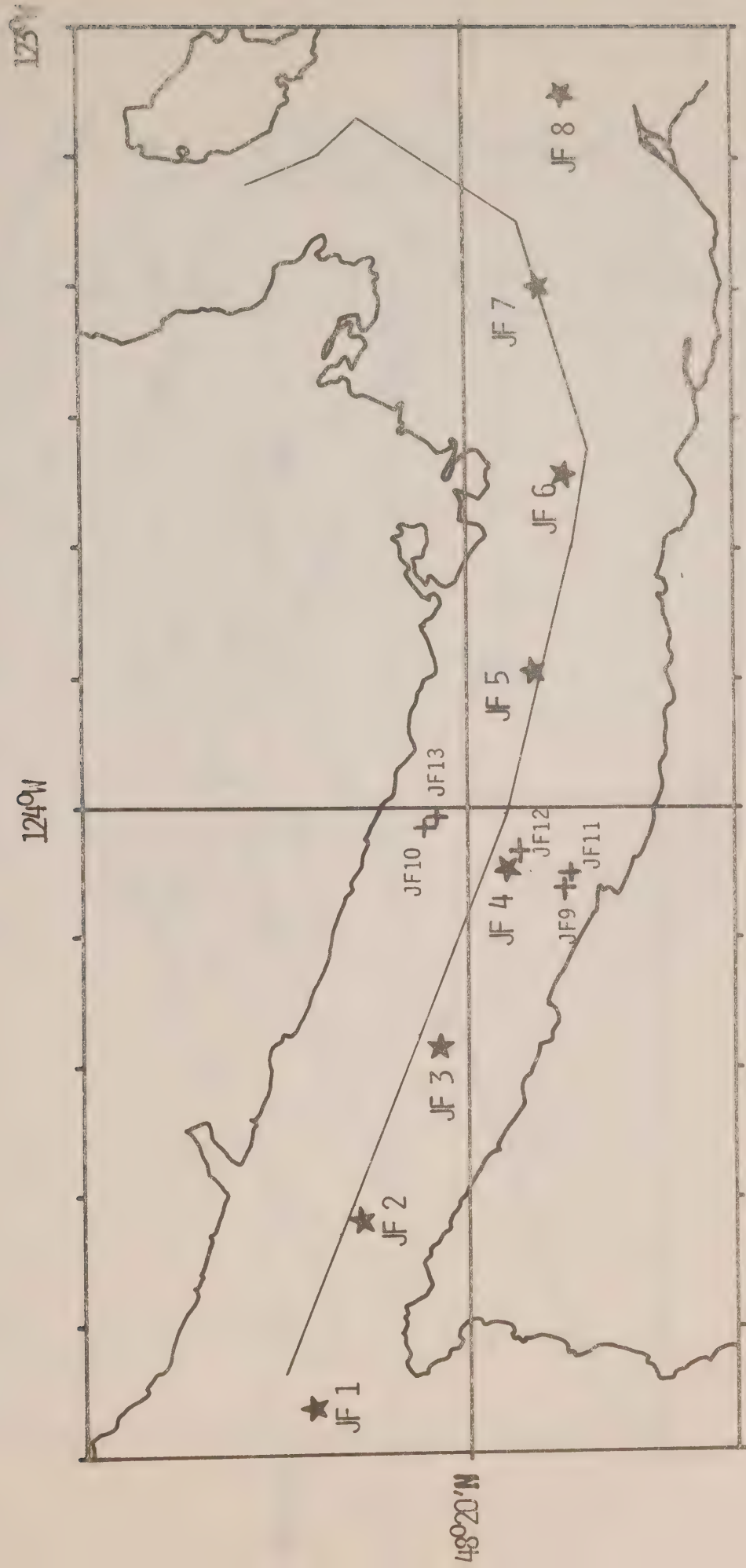


FIGURE 1

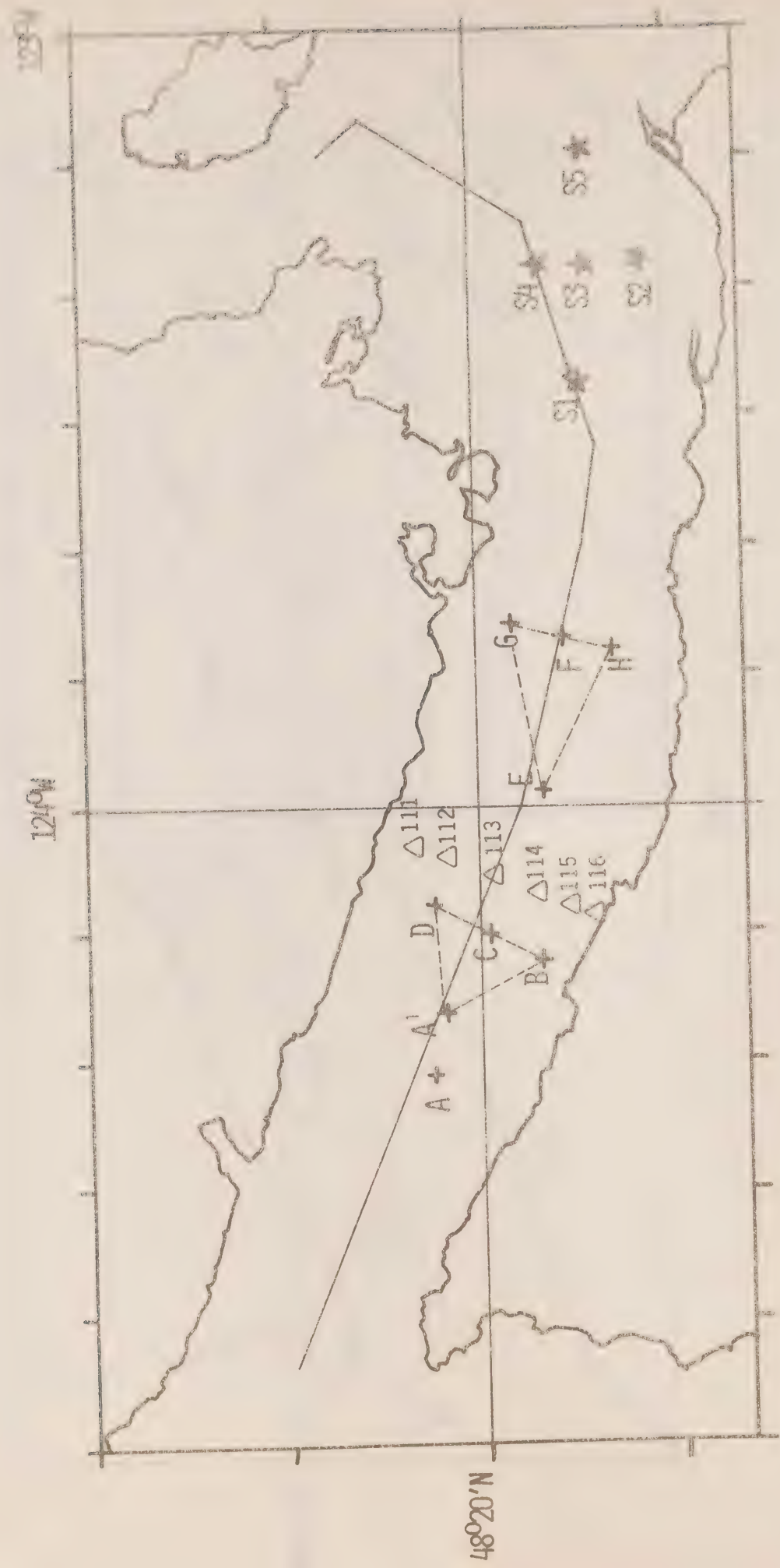


FIGURE 2





FIG. 3A

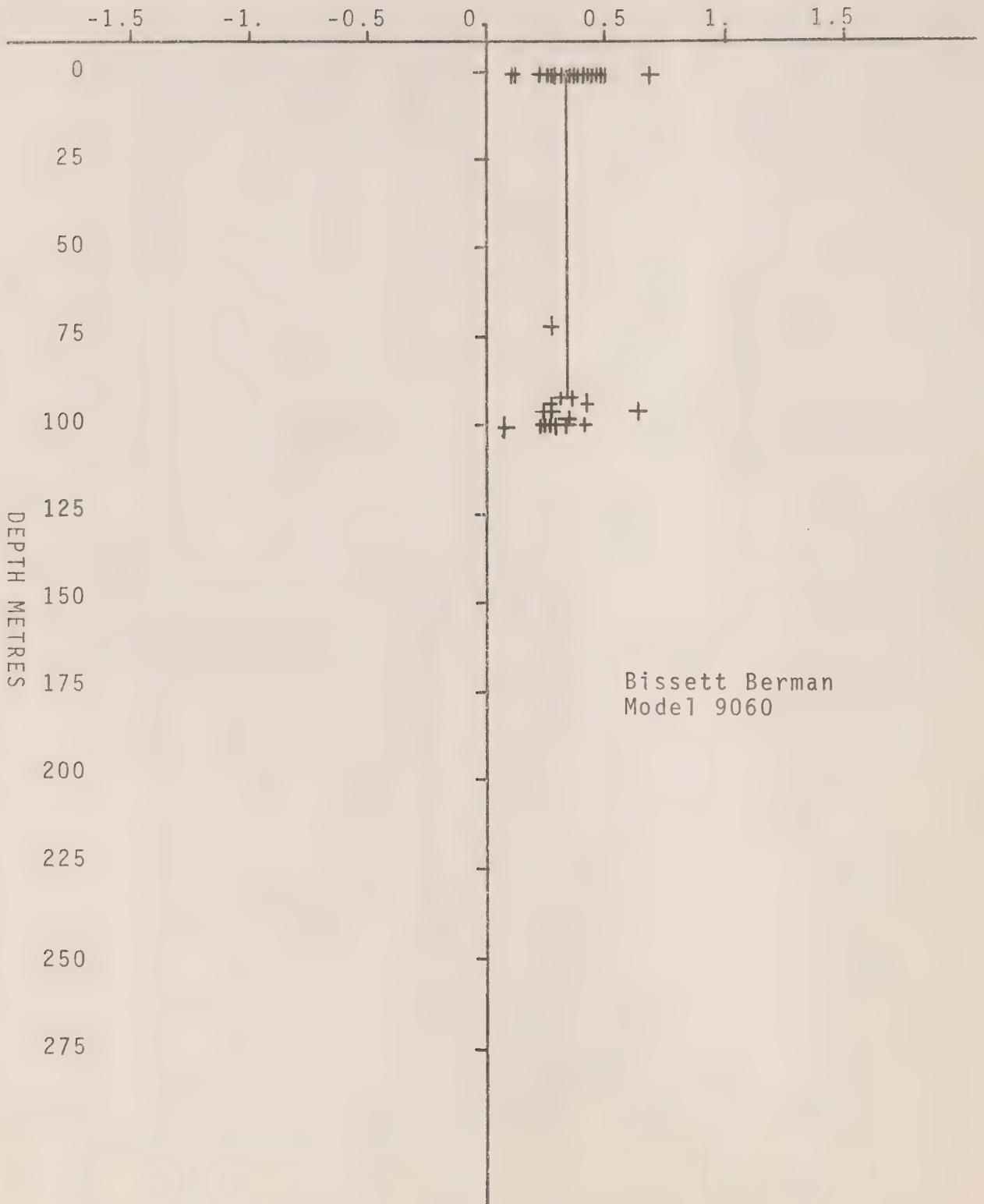
TEMPERATURE DEG. C  
STD - THERMOMETER

FIG. 3B





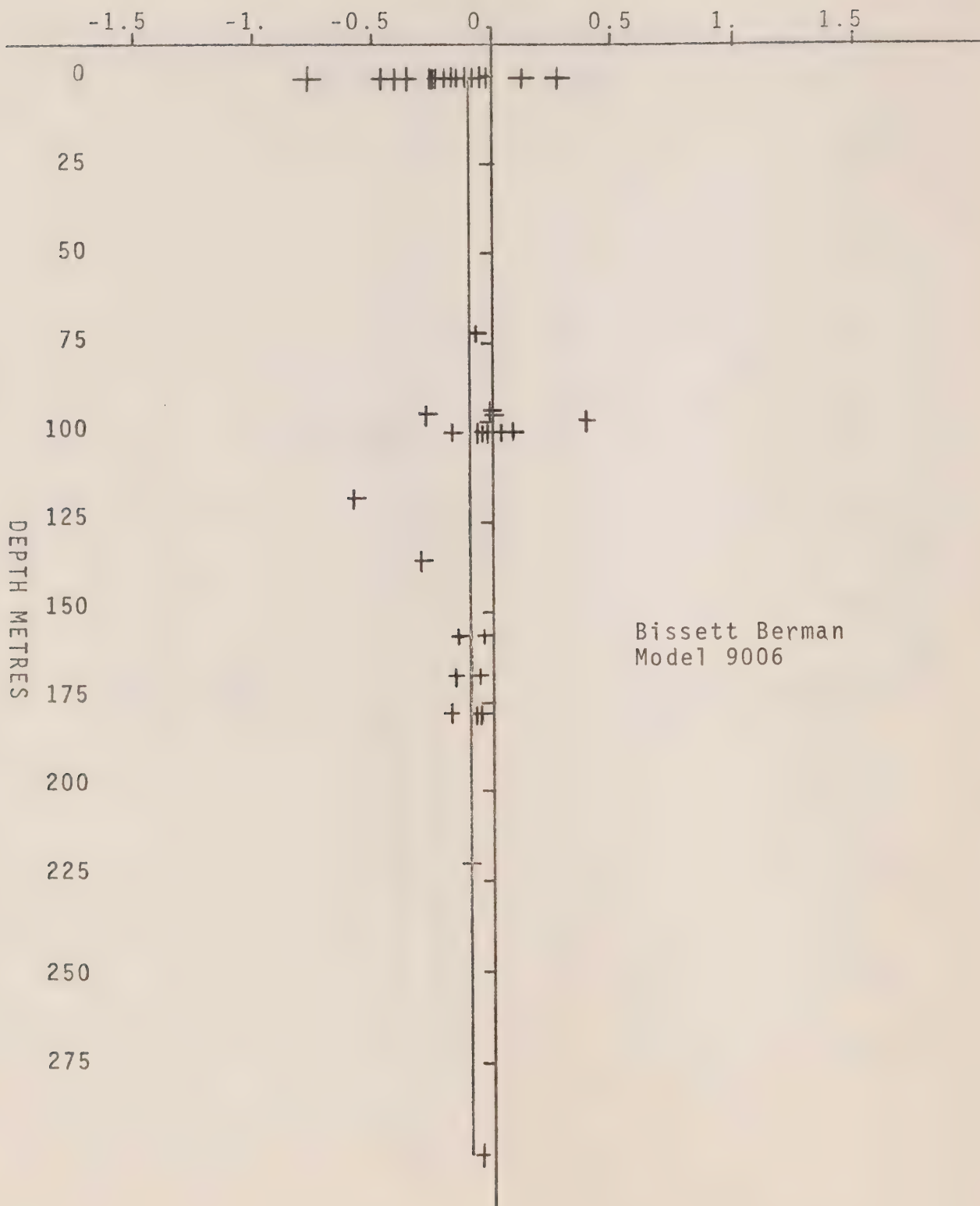
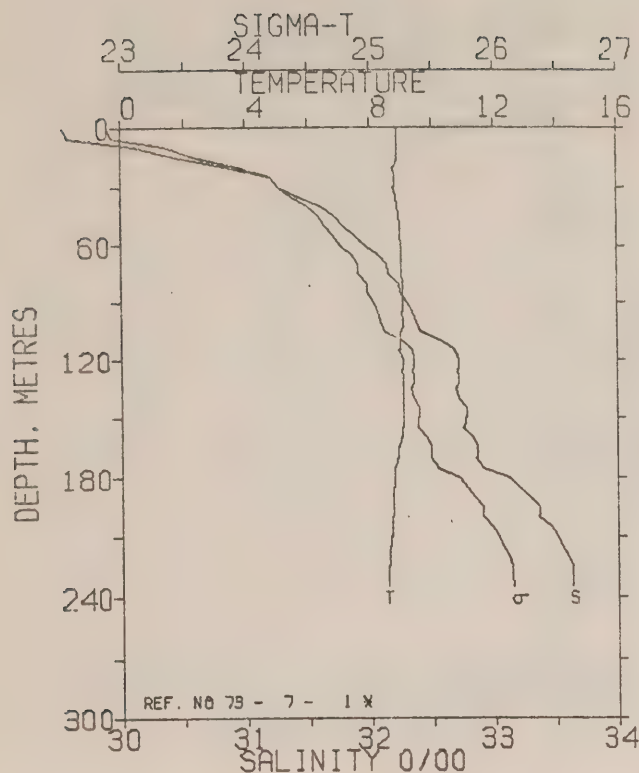
TEMPERATURE DEG. C  
STD - THERMOMETER

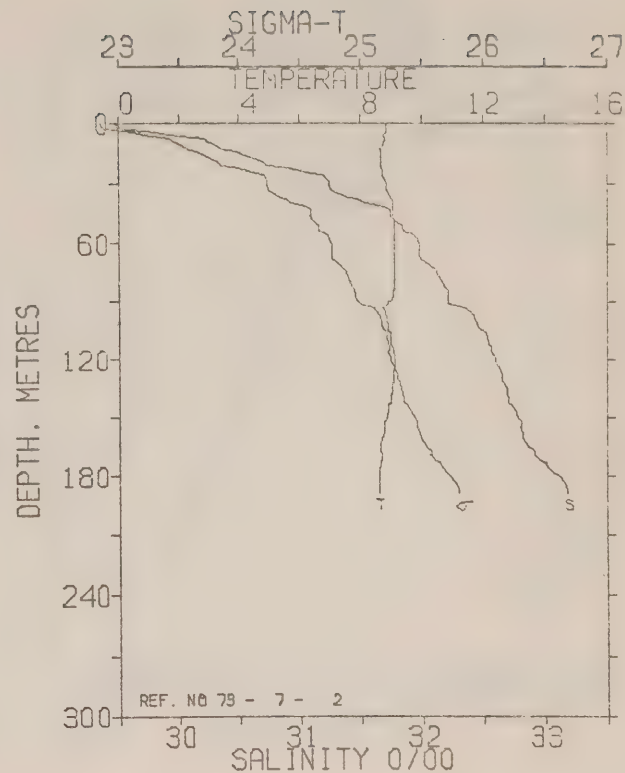
FIG. 4B



REFERENCE NO. 73- 7- 1 STN- JF1 \* DATE 5/ 3/73  
 POSITION 48-28.3N, 124-46.2W PST 19.4  
 RESULTS OF STD CAST 48 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.89	29.55	22.90	496.8	0.0	0.0	1479.
10	8.88	30.11	23.34	455.1	0.49	0.02	1480.
20	8.79	30.84	23.92	399.8	0.91	0.09	1481.
30	8.77	31.26	24.26	368.1	1.29	0.19	1482.
50	8.95	31.79	24.64	332.3	1.99	0.47	1483.
75	9.02	32.15	24.91	307.0	2.78	0.97	1484.
100	9.04	32.37	25.08	290.9	3.53	1.63	1485.
125	9.02	32.70	25.34	267.0	4.21	2.42	1486.
150	9.05	32.76	25.38	263.1	4.88	3.35	1486.
175	8.77	32.91	25.54	248.3	5.52	4.41	1486.
200	8.70	33.35	25.90	215.0	6.08	5.49	1487.
225	8.56	33.63	26.14	193.0	6.59	6.58	1487.

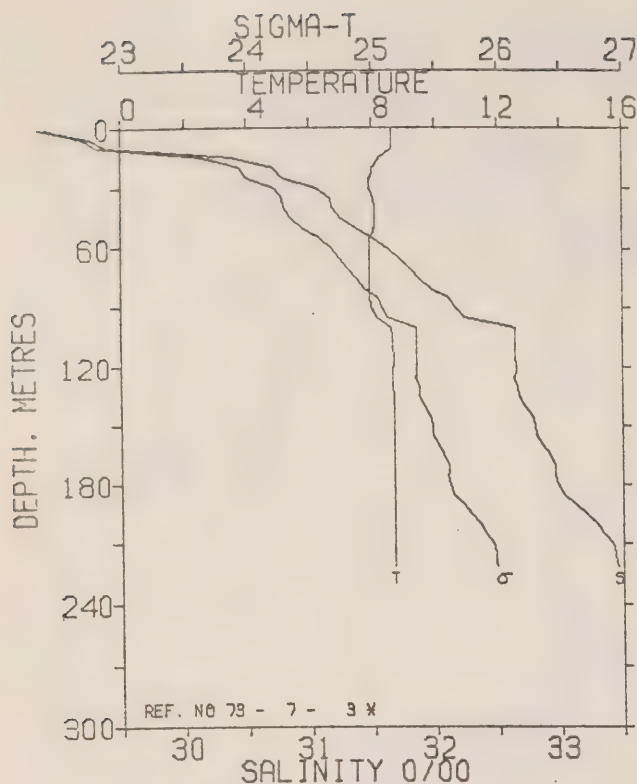
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.89	29.55	22.90	120.	9.03	32.71	25.34
5.	8.89	29.59	22.93	125.	9.02	32.70	25.34
10.	8.88	30.11	23.34	130.	9.04	32.71	25.35
15.	8.88	30.43	23.59	135.	9.05	32.69	25.32
20.	8.79	30.84	23.92	140.	9.04	32.71	25.35
25.	8.79	31.20	24.20	145.	9.06	32.77	25.39
30.	8.77	31.26	24.26	150.	9.05	32.76	25.38
35.	8.83	31.43	24.38	155.	9.02	32.75	25.38
40.	8.91	31.60	24.50	160.	8.95	32.83	25.45
45.	8.93	31.71	24.58	165.	8.90	32.86	25.48
50.	8.95	31.79	24.64	170.	8.84	32.85	25.49
55.	8.99	31.88	24.70	175.	8.77	32.51	25.54
60.	9.02	31.96	24.77	180.	8.74	33.11	25.71
65.	9.01	32.07	24.85	185.	8.72	33.21	25.78
70.	9.01	32.14	24.90	190.	8.73	33.29	25.84
75.	9.02	32.15	24.91	195.	8.72	33.36	25.90
80.	9.04	32.23	24.97	200.	8.70	33.35	25.90
85.	9.04	32.24	24.98	205.	8.66	33.45	25.98
90.	9.04	32.30	25.02	210.	8.63	33.51	26.04
95.	9.02	32.34	25.06	215.	8.59	33.54	26.06
100.	9.04	32.37	25.08	220.	8.58	33.60	26.11
105.	8.97	32.40	25.11	225.	8.56	33.63	26.14
110.	8.95	32.58	25.26	230.	8.55	33.63	26.14



REFERENCE NO. 73- 7- 2 STN- JF1 DATE 5/ 3/73  
 POSITION 48-28.4N, 124-46.5W PST 19.8  
 RESULTS OF STD CAST 113 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.85	29.48	22.86	501.2	0.0	0.0	1479.
10	8.74	30.26	23.48	442.1	0.47	0.02	1480.
20	8.69	30.71	23.84	408.1	0.90	0.09	1480.
30	8.82	31.24	24.23	370.8	1.28	0.19	1482.
50	9.08	31.81	24.63	332.7	1.98	0.47	1484.
75	9.10	32.12	24.88	309.9	2.79	0.58	1485.
100	8.84	32.44	25.17	282.9	3.53	1.64	1484.
125	9.08	32.63	25.28	272.7	4.23	2.44	1486.
150	8.82	32.78	25.43	258.4	4.89	3.37	1486.
175	8.59	33.03	25.66	237.0	5.52	4.41	1485.

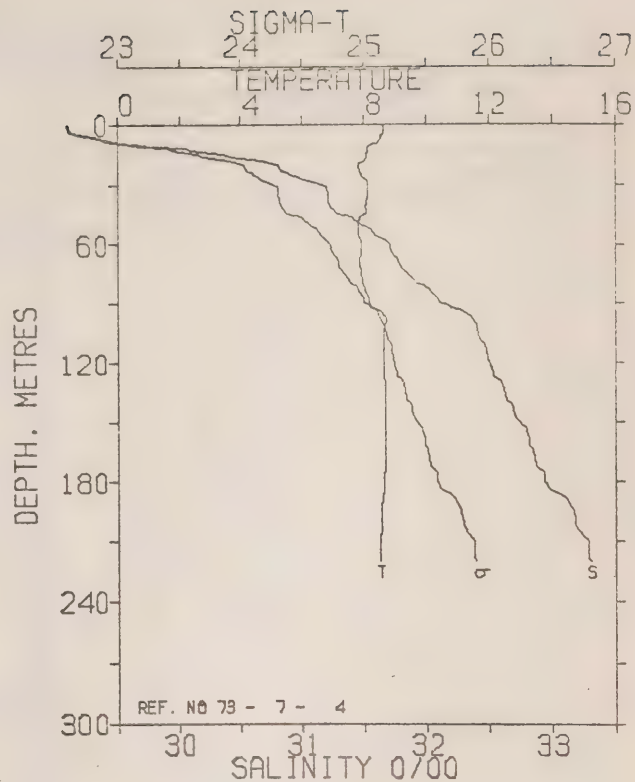
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.85	29.48	22.86	95.	8.79	32.40	25.14
5.	8.81	29.88	23.17	100.	8.84	32.44	25.17
10.	8.74	30.26	23.48	105.	8.92	32.50	25.20
15.	8.68	30.51	23.68	110.	9.00	32.53	25.21
20.	8.69	30.71	23.84	115.	9.07	32.57	25.23
25.	8.71	31.11	24.15	120.	9.11	32.60	25.25
30.	8.82	31.24	24.23	125.	9.08	32.63	25.28
35.	8.89	31.33	24.29	130.	9.04	32.66	25.30
40.	9.03	31.54	24.43	135.	9.01	32.69	25.33
45.	9.06	31.75	24.59	140.	8.95	32.71	25.35
50.	9.08	31.81	24.63	145.	8.90	32.74	25.39
55.	9.10	31.93	24.72	150.	8.82	32.78	25.43
60.	9.13	31.97	24.76	155.	8.77	32.60	25.46
65.	9.12	31.97	24.76	160.	8.70	32.82	25.48
70.	9.12	32.03	24.80	165.	8.60	32.86	25.53
75.	9.10	32.12	24.88	170.	8.65	32.93	25.58
80.	9.10	32.17	24.92	175.	8.59	33.03	25.66
85.	9.06	32.21	24.95	180.	8.59	33.11	25.73
90.	8.90	32.21	24.98	185.	8.58	33.17	25.78



REFERENCE NO. 73-7-3 STN- JF2 DATE 5/3/73  
 POSITION 48-25.8N, 124-31.9W PST 21.3  
 RESULTS OF STD CAST 46 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA C	POT EN	SOUND VEL
0	8.60	28.87	22.41	543.6	0.0	0.0	1477.
10	8.63	29.39	22.82	505.2	0.52	0.03	1478.
20	8.01	30.71	23.94	398.4	0.96	0.09	1478.
30	7.92	31.06	24.22	371.9	1.35	0.19	1478.
50	8.05	31.37	24.44	350.6	2.07	0.49	1479.
75	7.89	31.88	24.86	310.9	2.89	1.01	1480.
100	8.59	32.63	25.35	264.8	3.62	1.66	1484.
125	8.65	32.63	25.34	266.6	4.29	2.42	1484.
150	8.67	32.80	25.47	254.4	4.94	3.33	1485.
175	8.70	32.96	25.59	243.4	5.56	4.36	1486.
200	8.70	33.29	25.85	219.6	6.15	5.48	1487.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.60	28.87	22.41	115.	8.65	32.64	25.35
5.	8.61	29.27	22.72	120.	8.64	32.64	25.35
10.	8.63	29.29	22.82	125.	8.65	32.63	25.34
15.	8.20	30.37	23.64	130.	8.65	32.66	25.36
20.	8.01	30.71	23.94	135.	8.65	32.67	25.37
25.	7.93	30.78	24.00	140.	8.65	32.72	25.41
30.	7.92	31.06	24.22	145.	8.66	32.77	25.45
35.	8.04	31.17	24.29	150.	8.67	32.80	25.47
40.	8.07	31.18	24.29	155.	8.67	32.81	25.48
45.	8.07	31.25	24.35	160.	8.67	32.87	25.53
50.	8.05	31.37	24.44	165.	8.67	32.91	25.56
55.	7.89	31.50	24.57	170.	8.68	32.96	25.60
60.	7.89	31.63	24.67	175.	8.70	32.96	25.59
65.	7.89	31.70	24.73	180.	8.69	32.98	25.61
70.	7.90	31.79	24.80	185.	8.70	33.02	25.64
75.	7.89	31.88	24.86	190.	8.70	33.12	25.72
80.	7.89	31.57	24.94	195.	8.70	33.20	25.78
85.	7.89	32.10	25.04	200.	8.70	33.29	25.85
90.	7.95	32.16	25.08	205.	8.69	33.34	25.89
95.	8.13	32.23	25.11	210.	8.67	33.42	25.96
100.	8.59	32.63	25.35	215.	8.67	33.44	25.97
105.	8.63	32.63	25.35	220.	8.66	33.44	25.98

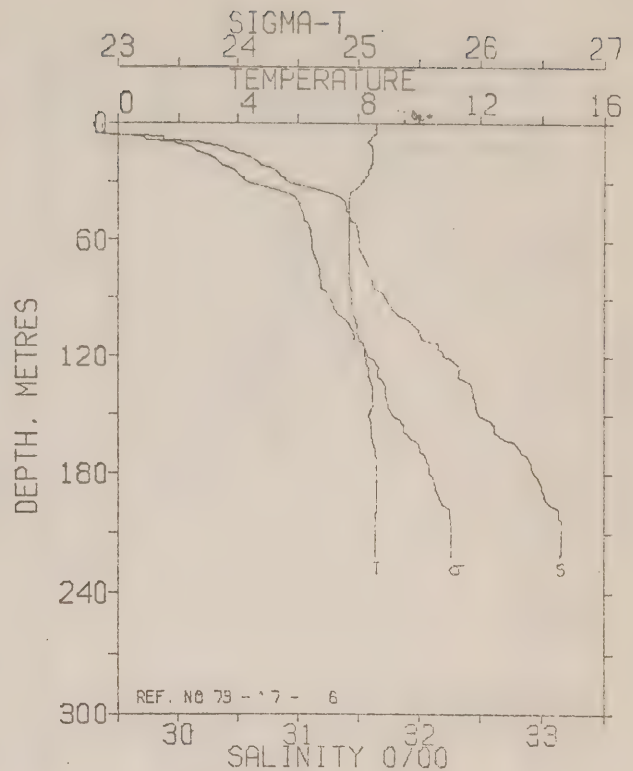
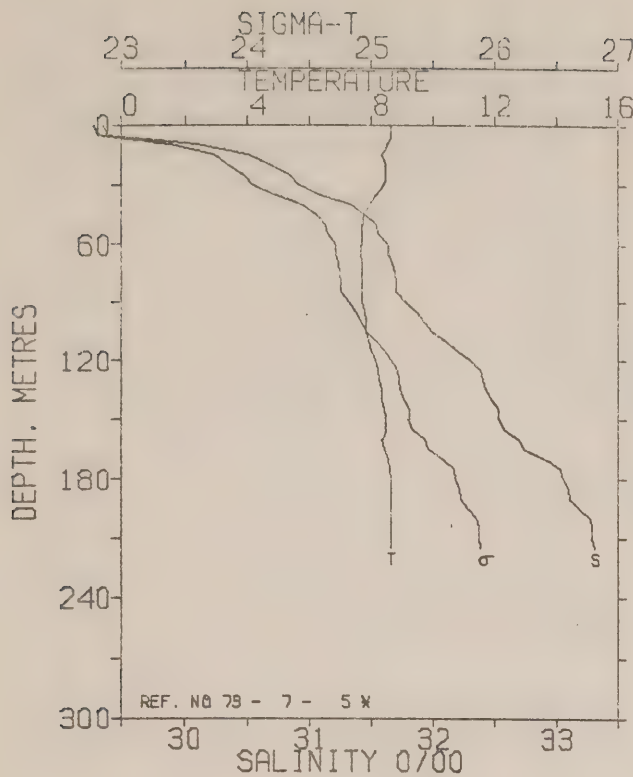


REFERENCE NO. 73-7-4 STN- JF2 DATE 5/3/73  
 POSITION 48-26.0N, 124-31.5W PST 21.7  
 RESULTS OF STD CAST 119 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA C	POT EN	SOUND VEL
0	8.63	29.10	22.59	526.5	0.0	0.0	1478.
10	8.26	29.65	23.07	481.3	0.51	0.03	1477.
20	7.85	30.80	24.03	385.8	0.94	0.09	1477.
30	8.13	31.15	24.26	367.4	1.32	0.19	1479.
50	7.84	31.48	24.56	339.6	2.04	0.48	1479.
75	7.91	31.85	24.84	312.9	2.85	0.99	1480.
100	8.70	32.39	25.15	284.5	3.59	1.66	1484.
125	8.64	32.53	25.26	273.9	4.29	2.45	1484.
150	8.69	32.74	25.42	259.2	4.96	3.39	1485.
175	8.64	32.93	25.58	244.9	5.59	4.43	1486.
200	8.55	33.18	25.79	225.2	6.17	5.55	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.63	29.10	22.59	115.	8.64	32.48	25.23
5.	8.56	29.21	22.69	120.	8.65	32.50	25.24
10.	8.26	29.65	23.07	125.	8.64	32.53	25.26
15.	8.08	30.36	23.65	130.	8.67	32.60	25.31
20.	7.85	30.80	24.03	135.	8.68	32.62	25.33
25.	7.89	30.90	24.10	140.	8.69	32.67	25.36
30.	8.13	31.15	24.26	145.	8.69	32.69	25.38
35.	8.13	31.21	24.31	150.	8.69	32.74	25.42
40.	8.07	31.21	24.32	155.	8.68	32.80	25.47
45.	7.99	31.28	24.38	160.	8.68	32.82	25.49
50.	7.84	31.48	24.56	165.	8.67	32.86	25.51
55.	7.85	31.58	24.64	170.	8.69	32.84	25.50
60.	7.92	31.71	24.73	175.	8.64	32.93	25.58
65.	7.89	31.73	24.75	180.	8.63	32.93	25.58
70.	7.87	31.78	24.79	185.	8.60	33.02	25.66
75.	7.91	31.85	24.84	190.	8.57	33.12	25.74
80.	7.94	31.92	24.89	195.	8.56	33.17	25.78
85.	8.08	32.05	24.97	200.	8.55	33.18	25.79
90.	8.17	32.10	25.00	205.	8.53	33.22	25.82
95.	8.58	32.33	25.12	210.	8.51	33.28	25.87
100.	8.70	32.39	25.15	215.	8.51	33.30	25.88
105.	8.64	32.42	25.18	220.	8.51	33.31	25.89



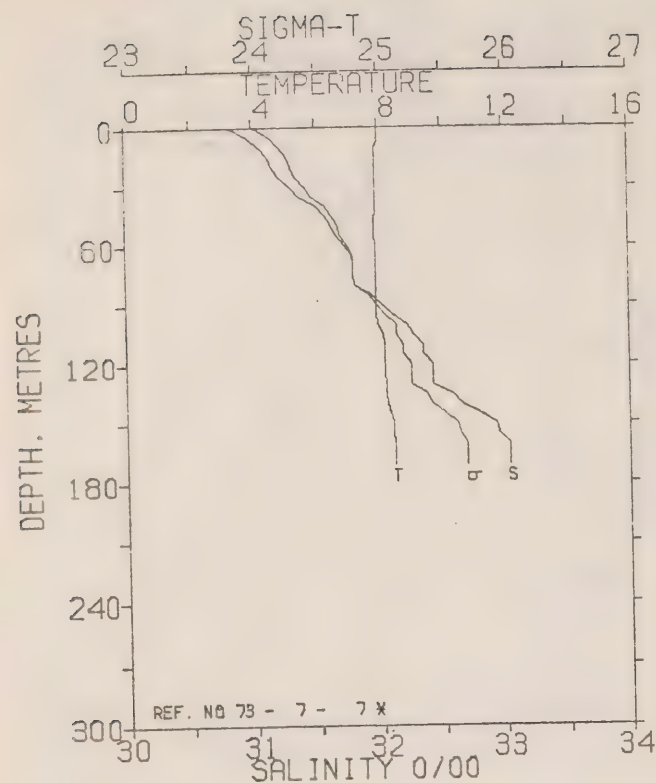


REFERENCE NO. 73-7-5 STN- JF3 DATE 5/ 3/73  
 POSITION 48-21.7N, 124-18.3W PST 22.9  
 RESULTS OF STD CAST 44 POINTS TAKEN FROM ANALOG TRACE

REFERENCE NO. 73-7-6 STN- JF3 DATE 5/ 3/73  
 POSITION 48-22.0N, 124-18.0W PST 23.2  
 RESULTS OF STD CAST 111 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL	DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.64	29.37	22.80	506.9	0.0	0.0	1478.	0	8.60	29.38	22.81	505.2	0.0	0.0	1478.
10	8.51	30.09	23.38	451.4	0.49	0.02	1479.	10	8.30	30.16	23.47	443.4	0.49	0.02	1478.
20	8.45	30.67	23.84	407.7	0.92	0.09	1479.	20	8.45	30.67	23.84	407.9	0.91	0.09	1479.
30	8.38	30.90	24.03	389.4	1.31	0.19	1480.	30	8.12	30.92	24.08	384.7	1.31	0.19	1479.
50	7.69	31.54	24.63	332.9	2.02	0.48	1478.	50	7.67	31.44	24.55	340.3	2.01	0.47	1478.
75	7.70	31.65	24.74	322.5	2.84	1.00	1479.	75	7.69	31.59	24.67	329.3	2.85	1.01	1479.
100	7.81	31.92	24.91	306.7	3.63	1.70	1480.	100	7.86	31.87	24.86	311.3	3.65	1.73	1480.
125	8.20	32.38	25.21	278.7	4.37	2.54	1482.	125	8.30	32.32	25.16	284.1	4.40	2.58	1483.
150	8.48	32.53	25.29	271.5	5.05	3.50	1484.	150	8.34	32.49	25.28	272.4	5.06	3.55	1483.
175	8.60	33.04	25.67	236.5	5.69	4.56	1485.	175	8.57	32.92	25.58	244.6	5.74	4.62	1485.
200	8.61	33.27	25.85	219.5	6.27	5.66	1486.	200	8.57	33.14	25.75	228.6	6.33	5.76	1486.

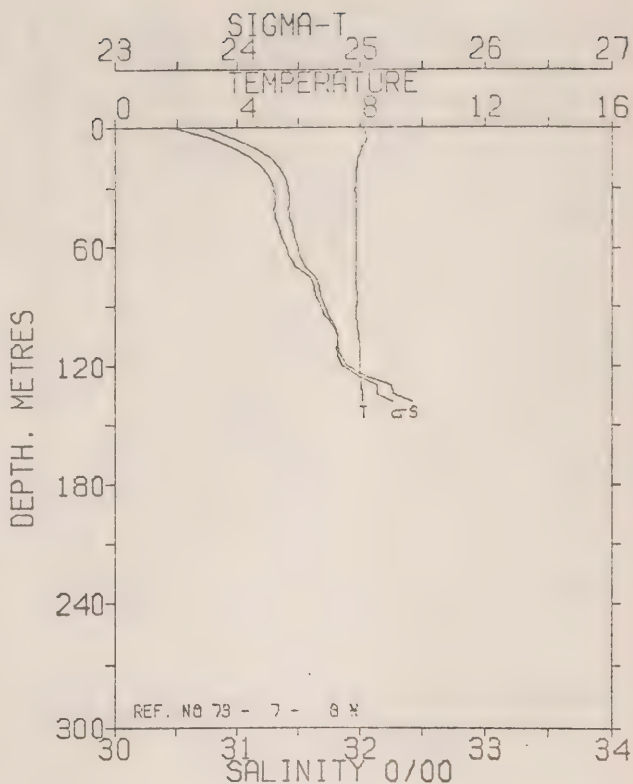
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.64	29.37	22.80	110.	7.62	32.11	25.04	0.	8.60	29.38	22.81	110.	7.67	32.02	24.97
5.	8.60	29.40	22.83	115.	8.00	32.20	25.10	5.	8.59	29.39	22.82	115.	8.18	32.16	25.04
10.	8.51	30.09	23.38	120.	8.13	32.30	25.16	10.	8.30	30.16	23.47	120.	8.21	32.20	25.07
15.	8.31	30.50	23.73	125.	8.20	32.38	25.21	15.	8.47	30.44	23.66	125.	8.30	32.32	25.16
20.	8.45	30.67	23.84	130.	8.27	32.40	25.22	20.	8.45	30.67	23.84	130.	8.32	32.34	25.16
25.	8.45	30.83	23.97	135.	8.32	32.42	25.23	25.	8.32	30.82	22.98	135.	8.44	32.43	25.22
30.	8.38	30.90	24.03	140.	8.34	32.47	25.27	30.	8.12	30.92	24.08	140.	8.47	32.45	25.22
35.	8.10	31.10	24.22	145.	8.40	32.54	25.31	35.	7.72	31.23	24.38	145.	8.46	32.46	25.24
40.	7.88	31.22	24.43	150.	8.48	32.53	25.29	40.	7.68	31.38	24.50	150.	8.34	32.49	25.28
45.	7.74	31.45	24.55	155.	8.46	32.57	25.33	45.	7.67	31.41	24.53	155.	8.42	32.41	25.36
50.	7.69	31.54	24.63	160.	8.35	32.70	25.44	50.	7.67	31.44	24.55	160.	8.39	32.65	25.40
55.	7.67	31.56	24.64	165.	8.40	32.73	25.46	55.	7.67	31.49	24.59	165.	8.49	32.79	25.50
60.	7.66	31.63	24.71	170.	8.57	32.93	25.59	60.	7.67	31.52	24.61	170.	8.55	32.87	25.55
65.	7.66	31.63	24.71	175.	8.60	33.04	25.67	65.	7.68	31.52	24.62	175.	8.57	32.92	25.58
70.	7.68	31.66	24.73	180.	8.61	33.05	25.68	70.	7.69	31.59	24.67	180.	8.58	32.93	25.59
75.	7.70	31.69	24.74	185.	8.63	33.10	25.71	75.	7.69	31.59	24.67	185.	8.58	32.99	25.64
80.	7.69	31.70	24.76	190.	8.63	33.11	25.72	80.	7.70	31.61	24.68	190.	8.58	33.02	25.66
85.	7.69	31.70	24.76	195.	8.61	33.18	25.78	85.	7.74	31.63	24.69	195.	8.58	33.07	25.70
90.	7.69	31.78	24.82	200.	8.61	33.27	25.85	90.	7.78	31.72	24.76	200.	8.57	33.14	25.75
95.	7.75	31.86	24.87	205.	8.61	33.29	25.87	95.	7.83	31.78	24.80	205.	8.57	33.16	25.77
100.	7.81	31.92	24.91	210.	8.61	33.30	25.87	100.	7.86	31.87	24.86	210.	8.57	33.16	25.77



REFERENCE NO. 73-7-7 STN-JF4 \* DATE 6/3/73  
 POSITION 48-17.7N, 124-4.4W PST 0.7  
 RESULTS OF STD CAST 36 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.01	30.82	24.02	389.7	0.0	0.0	1478.
10	7.92	31.05	24.21	371.9	0.38	0.02	1478.
20	7.91	31.16	24.30	363.9	0.75	0.08	1478.
30	7.92	31.30	24.41	353.9	1.11	0.17	1478.
50	7.87	31.63	24.67	328.7	1.79	0.44	1479.
75	7.89	31.79	24.80	317.3	2.59	0.95	1480.
100	7.95	32.23	25.13	285.8	3.35	1.63	1481.
125	8.15	32.42	25.25	274.6	4.05	2.43	1482.
150	8.39	32.94	25.62	240.1	4.70	3.34	1484.

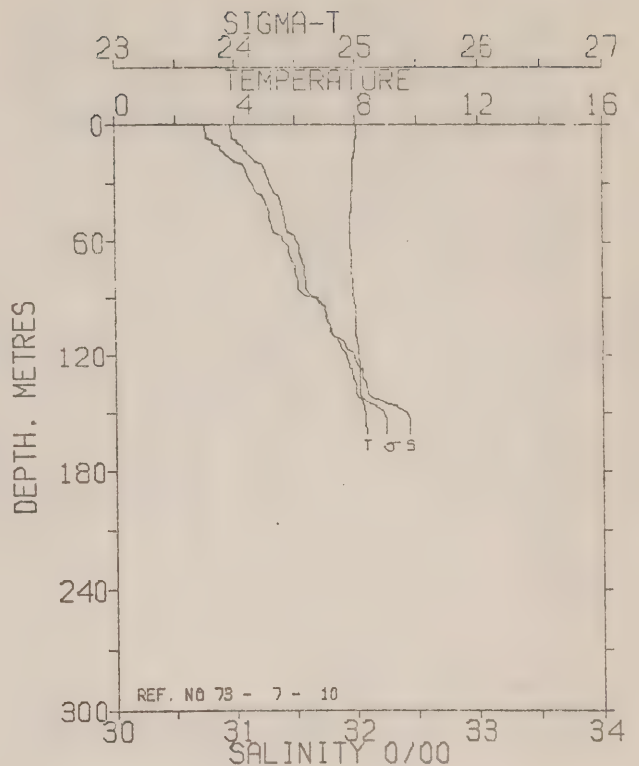
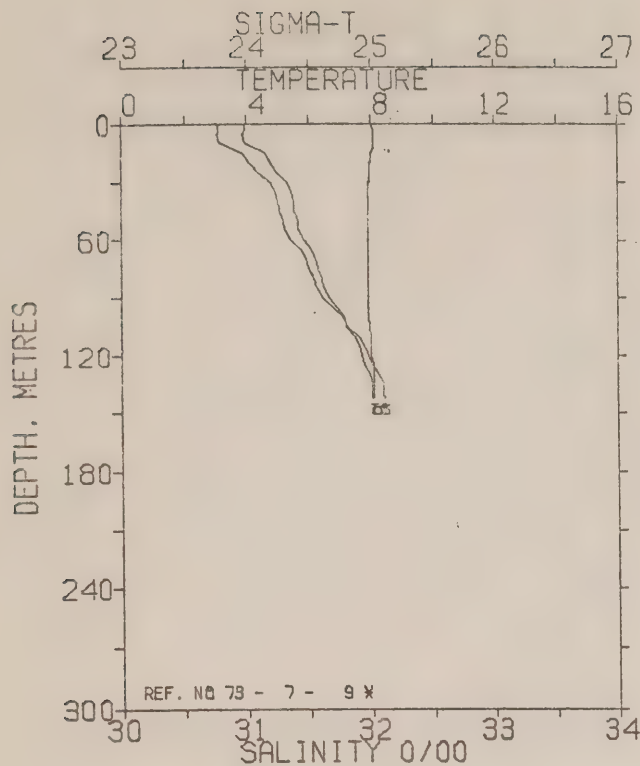
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.01	30.82	24.02	90.	7.90	32.02	24.98
5.	7.99	30.97	24.14	95.	7.90	32.10	25.04
10.	7.92	31.05	24.21	100.	7.95	32.23	25.13
15.	7.92	31.12	24.27	105.	8.14	32.27	25.14
20.	7.91	31.16	24.30	110.	8.16	32.25	25.19
25.	7.93	31.22	24.34	115.	8.16	32.35	25.19
30.	7.92	31.30	24.41	120.	8.15	32.42	25.25
35.	7.92	31.37	24.46	125.	8.15	32.42	25.25
40.	7.89	31.50	24.57	130.	8.20	32.43	25.25
45.	7.87	31.57	24.63	135.	8.21	32.57	25.37
50.	7.87	31.63	24.67	140.	8.26	32.66	25.43
55.	7.88	31.66	24.69	145.	8.35	32.80	25.52
60.	7.89	31.73	24.75	150.	8.39	32.94	25.62
65.	7.88	31.79	24.80	155.	8.40	32.95	25.63
70.	7.88	31.80	24.80	160.	8.44	33.04	25.69
75.	7.89	31.79	24.80	165.	8.46	33.04	25.69
80.	7.89	31.81	24.81	170.	8.48	33.04	25.69



REFERENCE NO. 73-7-8 STN-JF5 \* DATE 6/3/73  
 POSITION 48-16.5N, 123-49.5W PST 1.7  
 RESULTS OF STD CAST 29 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA C	POT EN	SOUND VEL
0	8.11	30.48	23.74	417.0	0.0	0.0	1477.
10	8.03	30.96	24.12	380.5	0.40	0.02	1478.
20	7.87	31.19	24.33	360.9	0.77	0.08	1478.
30	7.85	31.30	24.42	353.0	1.12	0.17	1478.
50	7.87	31.34	24.45	350.0	1.83	0.45	1478.
75	7.87	31.59	24.64	332.0	2.69	1.00	1479.
100	7.89	31.79	24.80	317.8	3.50	1.73	1480.
125	8.01	32.04	24.97	301.4	4.29	2.63	1481.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.11	30.48	23.74	70.	7.88	31.48	24.56
5.	8.18	30.77	23.96	75.	7.87	31.59	24.64
10.	8.03	30.96	24.12	80.	7.87	31.62	24.64
15.	7.88	31.11	24.27	85.	7.89	31.63	24.67
20.	7.87	31.19	24.33	90.	7.88	31.68	24.71
25.	7.86	31.27	24.39	95.	7.87	31.71	24.74
30.	7.85	31.30	24.42	100.	7.89	31.79	24.80
35.	7.86	31.30	24.42	105.	7.94	31.82	24.81
40.	7.86	31.29	24.41	110.	7.98	31.82	24.81
45.	7.86	31.30	24.42	115.	7.99	31.83	24.82
50.	7.87	31.34	24.45	120.	8.00	31.88	24.86
55.	7.87	31.36	24.46	125.	8.01	32.04	24.97
60.	7.87	31.40	24.50	130.	8.05	32.25	25.14
65.	7.88	31.42	24.51	135.	8.08	32.26	25.14



REFERENCE NO. 73-7-9 STN- JF6 \* DATE 6/ 3/73  
 POSITION 48-14.6N, 123-34.4W PST 2.7  
 RESULTS OF STD CAST 30 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA	SVA	DELTA	POT EN	SOUND
			T	D	D		VEL
0	8.06	30.77	23.98	394.1	0.0	0.0	1478.
10	8.07	30.78	23.98	393.9	0.39	0.02	1478.
20	7.95	31.02	24.18	374.8	0.78	0.08	1478.
30	7.89	31.19	24.33	361.5	1.15	0.17	1478.
50	7.89	31.29	24.41	354.0	1.86	0.46	1479.
75	7.91	31.50	24.57	339.3	2.73	1.01	1479.
100	7.92	31.78	24.78	319.1	3.55	1.75	1480.
125	8.07	32.01	24.94	304.4	4.33	2.64	1481.

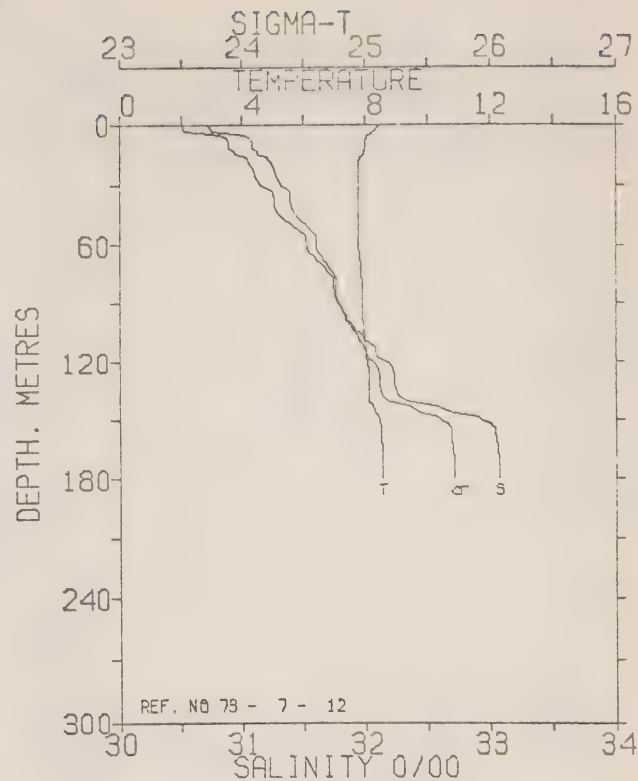
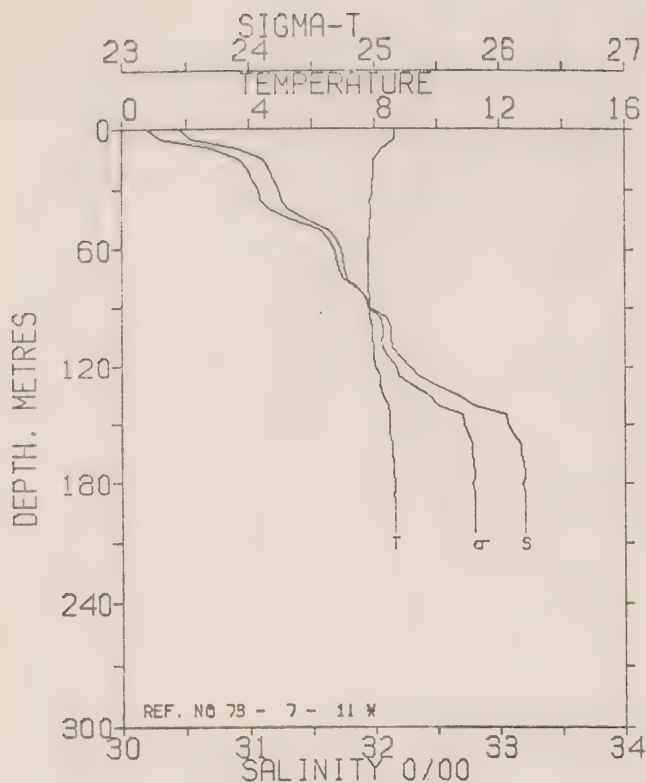
DEPTH	TEMP	SAL	SIGMA	DEPTH	TEMP	SAL	SIGMA
			T				T
0.	8.06	30.77	23.98	75.	7.91	31.50	24.57
5.	8.07	30.76	23.97	80.	7.90	31.54	24.60
10.	8.07	30.78	23.98	85.	7.91	31.56	24.61
15.	8.00	30.97	24.14	90.	7.50	31.61	24.65
20.	7.95	31.02	24.18	95.	7.91	31.69	24.72
25.	7.96	31.09	24.24	100.	7.92	31.78	24.78
30.	7.89	31.19	24.33	105.	7.94	31.80	24.80
35.	7.89	31.22	24.35	110.	7.99	31.51	24.88
40.	7.89	31.26	24.38	115.	7.98	31.54	24.90
45.	7.89	31.26	24.38	120.	7.99	31.57	24.93
50.	7.89	31.29	24.41	125.	8.07	32.01	24.94
55.	7.90	31.30	24.41	130.	8.09	32.07	24.99
60.	7.90	31.36	24.46	135.	8.07	32.09	25.01
65.	7.90	31.43	24.52	140.	8.07	32.09	25.01

REFERENCE NO. 73-7-10 STN- JF6 DATE 6/ 3/73  
 POSITION 48-14.5N, 123-34.6W PST 3.0  
 RESULTS OF STD CAST 79 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA	SVA	DELTA	POT EN	SOUND
			T	D	D		VEL
0	8.02	30.75	23.97	395.1	0.0	0.0	1477.
10	7.99	30.81	24.02	390.7	0.39	0.02	1478.
20	7.92	31.06	24.22	371.3	0.78	0.08	1478.
30	7.89	31.14	24.29	365.3	1.14	0.17	1478.
50	7.83	31.29	24.41	353.3	1.86	0.46	1478.
75	7.87	31.49	24.57	339.2	2.72	1.01	1479.
100	7.99	31.75	24.75	321.9	3.55	1.75	1480.
125	8.11	32.01	24.94	304.6	4.33	2.65	1481.
150	8.28	32.41	25.23	277.5	5.07	3.68	1483.

DEPTH	TEMP	SAL	SIGMA	DEPTH	TEMP	SAL	SIGMA
			T				T
0.	8.02	30.75	23.97	80.	7.88	31.51	24.58
5.	8.01	30.76	23.97	85.	7.90	31.52	24.59
10.	7.99	30.81	24.02	90.	7.95	31.66	24.69
15.	7.94	30.91	24.10	95.	7.97	31.74	24.75
20.	7.92	31.06	24.22	100.	7.99	31.75	24.75
25.	7.91	31.10	24.25	105.	8.00	31.79	24.78
30.	7.89	31.14	24.29	110.	8.01	31.83	24.81
35.	7.86	31.19	24.32	115.	8.05	31.51	24.87
40.	7.86	31.25	24.38	120.	8.09	31.58	24.92
45.	7.84	31.28	24.40	125.	8.11	32.01	24.94
50.	7.83	31.29	24.41	130.	8.12	32.05	24.97
55.	7.83	31.32	24.43	135.	8.13	32.09	24.99
60.	7.83	31.42	24.51	140.	8.14	32.10	25.00
65.	7.85	31.44	24.53	145.	8.21	32.26	25.12
70.	7.85	31.46	24.55	150.	8.28	32.41	25.23
75.	7.87	31.49	24.57	155.	8.30	32.43	25.24





REFERENCE NO. 73-7-11 STN- JF4 DATE 6/3/73  
 POSITION 48-17.7N, 124-4.4W PST 18.2  
 RESULTS OF STD CAST 42 POINTS TAKEN FROM ANALOG TRACE

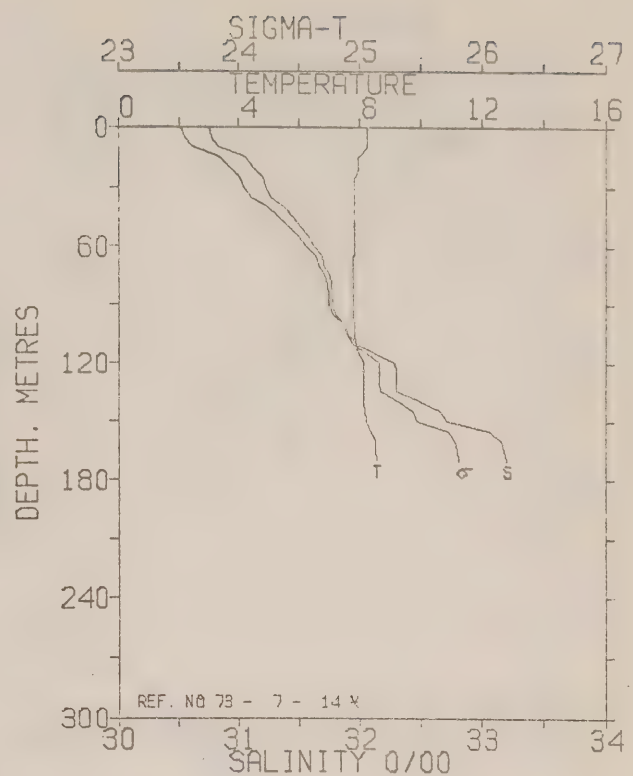
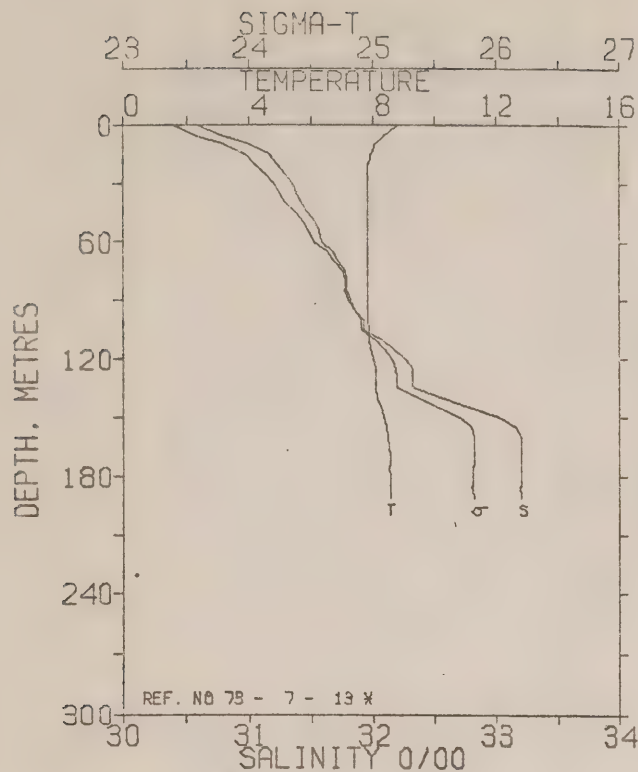
DEPTH	TEMP	SAL	SIGMA	SVA	DELTA	POT EN	SOUND
			T	D	D		VEL
0	8.61	30.20	23.45	444.8	0.0	0.0	1479.
10	8.21	30.70	23.90	402.0	0.43	0.02	1478.
20	7.95	30.98	24.16	377.5	0.82	0.08	1478.
30	7.88	31.06	24.23	370.6	1.19	0.18	1478.
50	7.84	31.56	24.63	333.3	1.91	0.47	1479.
75	7.77	31.74	24.78	319.4	2.72	0.58	1479.
100	7.90	32.13	25.06	292.4	3.48	1.66	1480.
125	8.15	32.34	25.19	280.6	4.20	2.49	1482.
150	8.46	33.07	25.71	231.6	4.83	3.37	1485.
175	8.59	33.21	25.80	223.5	5.40	4.31	1486.
200	8.61	33.20	25.79	224.8	5.96	5.38	1486.

REFERENCE NO. 73-7-12 STN- JF4 DATE 6/3/73  
 POSITION 48-18.2N, 124-4.5W PST 19.0  
 RESULTS OF STD CAST 90 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA	SVA	DELTA	PCT EN	SOUND
			T	D	D		VEL
0	8.39	30.51	23.73	418.0	0.0	0.0	1479.
10	7.99	30.89	24.08	384.7	0.40	0.02	1478.
20	7.80	31.06	24.24	365.8	0.78	0.08	1477.
30	7.77	31.15	24.31	362.9	1.14	0.17	1478.
50	7.76	31.42	24.52	343.1	1.85	0.46	1478.
75	7.86	31.71	24.74	322.6	2.68	0.99	1479.
100	7.94	31.88	24.86	311.6	3.48	1.70	1480.
125	8.10	32.22	25.11	288.7	4.23	2.56	1482.
150	8.45	32.93	25.61	241.7	4.92	3.52	1484.
175	8.54	33.07	25.70	232.9	5.50	4.49	1485.

DEPTH	TEMP	SAL	SIGMA	DEPTH	TEMP	SAL	SIGMA
			T				T
0.	8.61	30.20	23.45	105.	7.92	32.12	25.05
5.	8.58	30.30	23.54	110.	7.94	32.13	25.06
10.	8.21	30.70	23.90	115.	7.95	32.20	25.11
15.	7.95	30.91	24.10	120.	8.01	32.28	25.17
20.	7.95	30.98	24.16	125.	8.15	32.34	25.19
25.	7.92	31.01	24.18	130.	8.17	32.49	25.31
30.	7.88	31.06	24.23	135.	8.24	32.65	25.42
35.	7.85	31.08	24.25	140.	8.41	32.80	25.51
40.	7.86	31.16	24.31	145.	8.46	33.05	25.70
45.	7.84	31.33	24.44	150.	8.46	33.07	25.71
50.	7.84	31.56	24.63	155.	8.47	33.11	25.74
55.	7.76	31.62	24.68	160.	8.54	33.18	25.78
60.	7.77	31.68	24.73	165.	8.57	33.18	25.78
65.	7.76	31.69	24.74	170.	8.58	33.19	25.79
70.	7.76	31.71	24.75	175.	8.59	33.21	25.80
75.	7.77	31.74	24.78	180.	8.60	33.18	25.78
80.	7.77	31.86	24.87	185.	8.60	33.20	25.79
85.	7.81	31.93	24.92	190.	8.61	33.20	25.79
90.	7.83	31.96	24.94	195.	8.60	33.20	25.79
95.	7.85	32.10	25.04	200.	8.61	33.20	25.79

DEPTH	TEMP	SAL	SIGMA	DEPTH	TEMP	SAL	SIGMA
			T				T
0.	8.39	30.51	23.73	90.	7.50	31.77	24.78
5.	8.04	30.82	24.01	95.	7.92	31.84	24.83
10.	7.99	30.89	24.08	100.	7.94	31.88	24.86
15.	7.93	30.94	24.13	105.	7.96	31.96	24.92
20.	7.80	31.06	24.24	110.	8.00	32.02	24.97
25.	7.78	31.10	24.27	115.	8.03	32.08	25.01
30.	7.77	31.15	24.31	120.	8.08	32.17	25.07
35.	7.78	31.25	24.29	125.	8.10	32.22	25.11
40.	7.78	31.27	24.40	130.	8.10	32.24	25.12
45.	7.78	31.30	24.43	135.	8.10	32.25	25.13
50.	7.76	31.42	24.52	140.	8.14	32.33	25.18
55.	7.77	31.52	24.60	145.	8.30	32.65	25.41
60.	7.78	31.52	24.60	150.	8.45	32.93	25.61
65.	7.83	31.58	24.64	155.	8.51	33.04	25.69
70.	7.85	31.64	24.69	160.	8.51	33.05	25.69
75.	7.86	31.71	24.74	165.	8.53	33.07	25.70
80.	7.89	31.74	24.76	170.	8.54	33.07	25.70
85.	7.89	31.75	24.77	175.	8.54	33.07	25.70



REFERENCE NO. 73-7-13 STN- JF4 \* DATE 6/3/73  
 POSITION 48-17.7N, 124-4.4W PST 19.4  
 RESULTS OF STD CAST 40 POINTS TAKEN FROM ANALOG TRACE

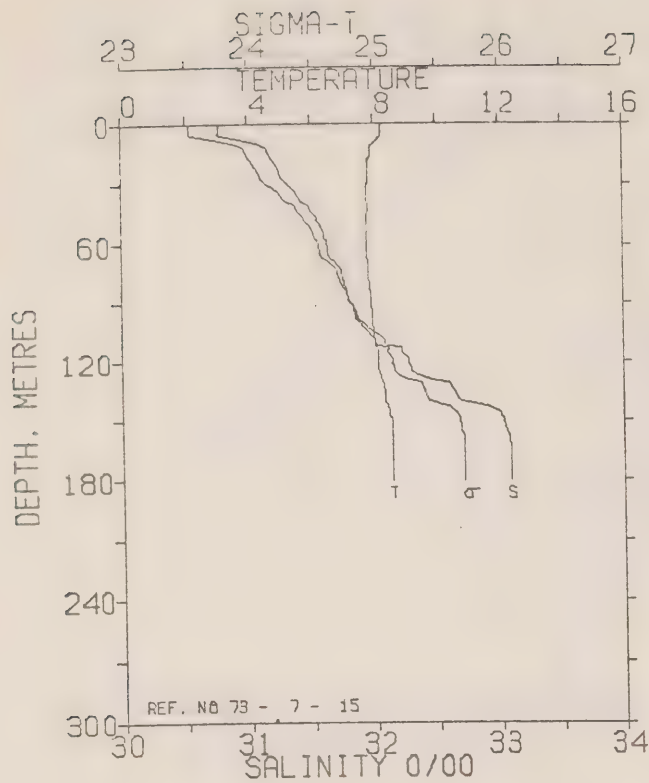
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.75	30.40	23.58	432.0	0.0	0.0	1480.
10	8.05	30.79	23.99	392.8	0.41	0.02	1478.
20	7.82	31.04	24.22	371.6	0.79	0.08	1477.
30	7.83	31.20	24.35	355.6	1.16	0.17	1478.
50	7.84	31.43	24.53	342.6	1.86	0.46	1478.
75	7.85	31.75	24.77	319.5	2.69	0.99	1479.
100	7.85	31.92	24.90	307.6	3.48	1.69	1480.
125	8.07	32.32	25.18	281.5	4.22	2.53	1482.
150	8.31	33.02	25.70	233.0	4.89	3.46	1484.
175	8.52	33.20	25.81	223.1	5.45	4.39	1485.

REFERENCE NO. 73-7-14 STN- JF4 \* DATE 6/3/73  
 POSITION 48-17.7N, 124-4.4W PST 20.6  
 RESULTS OF STD CAST 35 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.26	30.52	23.75	415.9	0.0	0.0	1478.
10	8.24	30.61	23.82	409.3	0.41	0.02	1478.
20	7.94	30.92	24.11	381.8	0.80	0.08	1478.
30	7.85	31.04	24.22	371.8	1.18	0.18	1478.
50	7.83	31.41	24.51	344.3	1.90	0.47	1478.
75	7.79	31.71	24.75	321.6	2.73	0.99	1479.
100	7.81	31.87	24.87	310.7	3.52	1.70	1480.
125	8.11	32.29	25.16	283.8	4.27	2.56	1482.
150	8.21	32.70	25.47	254.9	4.95	3.51	1483.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.75	30.40	23.58	100.	7.85	31.92	24.90
5.	8.35	30.56	23.77	105.	7.86	31.92	24.90
10.	8.05	30.79	23.99	110.	7.87	32.07	25.02
15.	7.88	30.97	24.15	115.	7.93	32.16	25.08
20.	7.82	31.04	24.22	120.	7.99	32.25	25.14
25.	7.83	31.13	24.29	125.	8.07	32.32	25.18
30.	7.83	31.20	24.35	130.	8.07	32.32	25.19
35.	7.83	31.24	24.38	135.	8.08	32.32	25.19
40.	7.84	31.28	24.41	140.	8.11	32.57	25.38
45.	7.85	31.36	24.47	145.	8.24	32.78	25.52
50.	7.84	31.43	24.53	150.	8.31	33.02	25.70
55.	7.84	31.48	24.56	155.	8.40	33.16	25.79
60.	7.84	31.51	24.59	160.	8.49	33.20	25.81
65.	7.84	31.62	24.67	165.	8.50	33.20	25.81
70.	7.84	31.68	24.72	170.	8.52	33.21	25.81
75.	7.85	31.75	24.77	175.	8.52	33.21	25.81
80.	7.85	31.77	24.79	180.	8.53	33.20	25.81
85.	7.84	31.76	24.78	185.	8.54	33.20	25.80
90.	7.84	31.80	24.81	190.	8.54	33.21	25.81

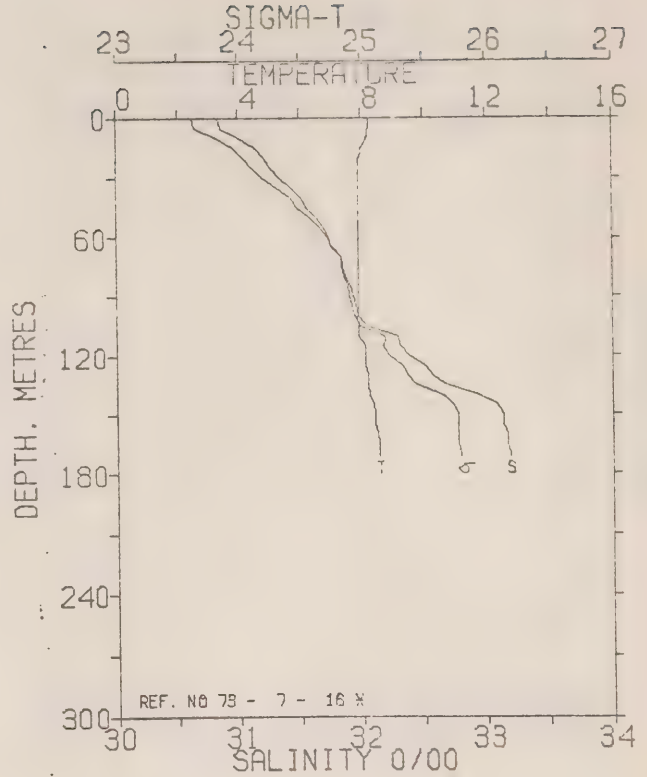
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.26	30.52	23.75	85.	7.78	31.74	24.77
5.	8.26	30.55	23.77	90.	7.79	31.74	24.78
10.	8.24	30.61	23.82	95.	7.77	31.78	24.80
15.	7.95	30.84	24.05	100.	7.81	31.87	24.87
20.	7.94	30.92	24.11	105.	7.83	31.90	24.89
25.	7.85	31.01	24.19	110.	7.86	31.97	24.95
30.	7.85	31.04	24.22	115.	7.94	32.12	25.05
35.	7.84	31.11	24.27	120.	8.10	32.29	25.16
40.	7.82	31.23	24.37	125.	8.11	32.29	25.16
45.	7.83	31.33	24.45	130.	8.13	32.29	25.16
50.	7.83	31.41	24.51	135.	8.12	32.30	25.16
55.	7.83	31.48	24.57	140.	8.12	32.52	25.34
60.	7.82	31.56	24.63	145.	8.17	32.66	25.43
65.	7.78	31.63	24.69	150.	8.21	32.70	25.47
70.	7.79	31.65	24.70	155.	8.34	33.06	25.73
75.	7.79	31.71	24.75	160.	8.51	33.16	25.78
80.	7.79	31.73	24.76	165.	8.51	33.18	25.80



REFERENCE NO. 73- 7- 15 STN- JF4 DATE 6/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 20.9  
 RESULTS OF STD CAST 91 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.23	30.53	23.77	414.4	0.0	0.0	1478.
10	7.99	30.87	24.06	386.2	0.41	0.02	1478.
20	7.83	31.04	24.22	371.7	0.78	0.08	1477.
30	7.78	31.15	24.31	363.0	1.15	0.17	1478.
50	7.78	31.47	24.56	339.1	1.85	0.46	1478.
75	7.84	31.71	24.74	322.4	2.68	0.58	1479.
100	7.95	31.91	24.88	309.6	3.47	1.69	1480.
125	8.15	32.30	25.16	283.9	4.21	2.53	1482.
150	8.52	33.04	25.68	234.8	4.85	3.43	1485.
175	8.56	33.08	25.71	232.6	5.43	4.39	1485.

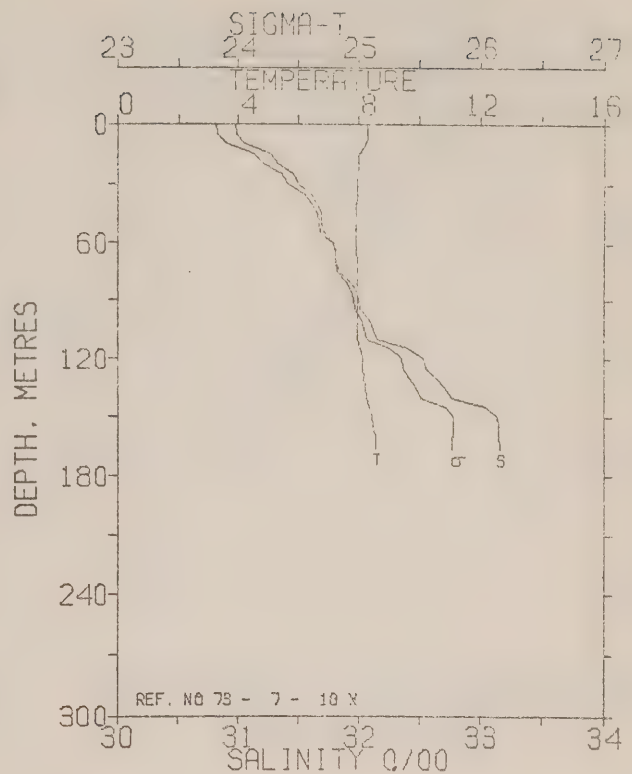
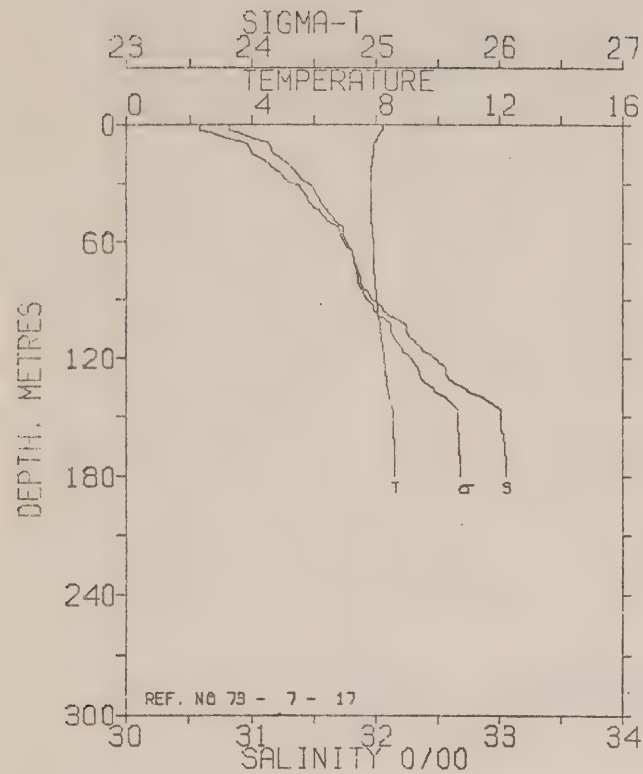
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.23	30.53	23.77	90.	7.92	31.81	24.81
5.	8.24	30.53	23.76	95.	7.94	31.86	24.84
10.	7.99	30.87	24.06	100.	7.95	31.81	24.88
15.	7.89	30.98	24.16	105.	7.98	32.01	24.96
20.	7.83	31.04	24.22	110.	8.03	32.08	25.01
25.	7.82	31.09	24.26	115.	8.11	32.23	25.11
30.	7.78	31.15	24.31	120.	8.13	32.28	25.14
35.	7.78	31.25	24.39	125.	8.15	32.30	25.16
40.	7.80	31.24	24.46	130.	8.25	32.52	25.31
45.	7.78	31.41	24.51	135.	8.30	32.64	25.40
50.	7.78	31.47	24.56	140.	8.35	32.70	25.44
55.	7.79	31.52	24.60	145.	8.46	32.97	25.64
60.	7.79	31.56	24.63	150.	8.52	33.04	25.68
65.	7.79	31.57	24.64	155.	8.54	33.05	25.69
70.	7.82	31.65	24.70	160.	8.55	33.08	25.71
75.	7.84	31.71	24.74	165.	8.55	33.08	25.71
80.	7.86	31.74	24.76	170.	8.55	33.08	25.71
85.	7.90	31.78	24.79	175.	8.56	33.08	25.71



REFERENCE NO. 73- 7- 16 STN- JF4 \* DATE 6/ 3/73  
 POSITION 48-17.7N, 124- 4.4W PST 21.5  
 RESULTS OF STD CAST 36 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.23	30.63	23.84	407.4	0.0	0.0	1478.
10	8.16	30.81	24.00	392.7	0.40	0.02	1478.
20	7.93	31.04	24.21	372.8	0.78	0.08	1478.
30	7.90	31.20	24.33	360.8	1.15	0.17	1478.
50	7.89	31.59	24.64	331.9	1.84	0.45	1479.
75	7.89	31.85	24.84	313.1	2.65	0.96	1480.
100	7.88	31.98	24.95	303.4	3.42	1.65	1480.
125	8.14	32.52	25.33	267.4	4.13	2.46	1482.
150	8.42	33.14	25.77	225.9	4.75	3.33	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.23	30.63	23.84	90.	7.90	31.93	24.91
5.	8.21	30.64	23.86	95.	7.89	31.95	24.92
10.	8.16	30.81	24.00	100.	7.88	31.98	24.95
15.	7.97	30.95	24.13	105.	7.90	32.04	24.99
20.	7.93	31.04	24.21	110.	7.92	32.20	25.19
25.	7.92	31.12	24.27	115.	8.12	32.21	25.17
30.	7.90	31.20	24.33	120.	8.12	32.28	25.23
35.	7.88	31.32	24.43	125.	8.14	32.52	25.33
40.	7.89	31.42	24.51	130.	8.18	32.57	25.37
45.	7.90	31.48	24.55	135.	8.20	32.67	25.44
50.	7.89	31.59	24.64	140.	8.24	32.95	25.65
55.	7.90	31.66	24.69	145.	8.37	33.08	25.73
60.	7.89	31.72	24.75	150.	8.42	33.14	25.77
65.	7.89	31.75	24.77	155.	8.44	33.14	25.77
70.	7.90	31.84	24.83	160.	8.50	33.16	25.78
75.	7.89	31.85	24.84	165.	8.56	33.17	25.78
80.	7.89	31.87	24.86	170.	8.56	33.19	25.79



REFERENCE NO. 73-7-17 STN- JF4 DATE 6/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 21.9  
 RESULTS OF STD CAST 96 POINTS TAKEN FROM ANALOG TRACE

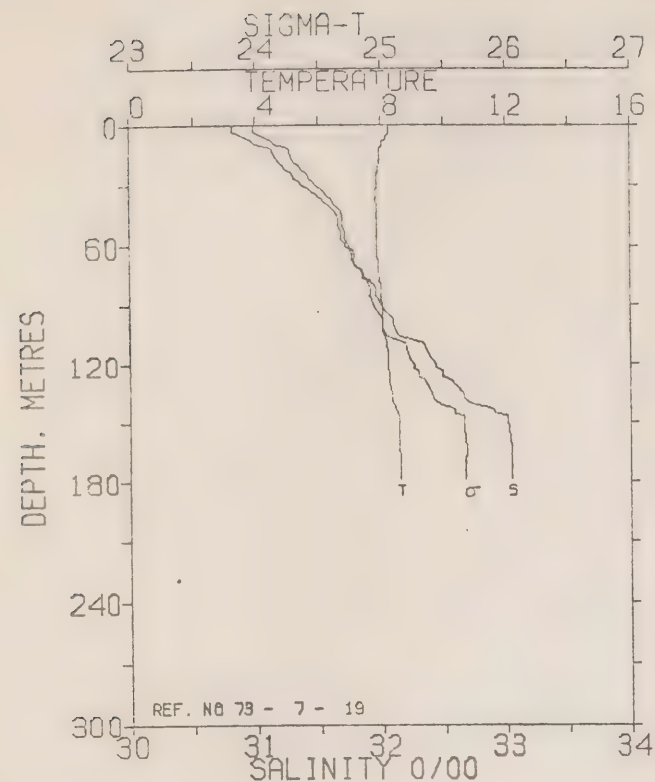
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.18	30.58	23.81	409.9	0.0	0.0	1478.
10	7.92	30.95	24.14	379.4	0.40	0.02	1478.
20	7.85	31.13	24.29	365.2	0.77	0.08	1478.
30	7.83	31.33	24.44	350.3	1.13	0.17	1478.
50	7.83	31.63	24.68	328.4	1.81	0.44	1479.
75	7.92	31.85	24.84	313.2	2.61	0.55	1480.
100	8.08	32.18	25.08	291.2	3.37	1.63	1481.
125	8.29	32.56	25.34	266.6	4.07	2.44	1483.
150	8.54	33.01	25.66	236.7	4.70	3.32	1485.
175	8.58	33.05	25.68	235.1	5.29	4.29	1485.

REFERENCE NO. 73-7-18 STN- JF4 \* DATE 6/ 3/73  
 POSITION 48-17.7N, 124- 4.4W PST 22.7  
 RESULTS OF STD CAST 35 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.29	30.81	23.98	394.2	0.0	0.0	1479.
10	8.22	30.90	24.05	387.3	0.39	0.02	1479.
20	7.98	31.21	24.33	361.0	0.76	0.08	1478.
30	7.95	31.41	24.49	345.8	1.11	0.17	1479.
50	7.93	31.67	24.69	326.8	1.78	0.44	1479.
75	7.94	31.83	24.82	315.0	2.58	0.94	1480.
100	7.94	32.08	25.02	296.7	3.34	1.62	1481.
125	8.14	32.56	25.36	264.5	4.04	2.43	1482.
150	8.43	33.14	25.77	225.9	4.66	3.29	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.18	30.58	23.81	90.	8.00	31.58	24.93	0.	8.29	30.81	23.98	85.	7.94	31.97	24.93
5.	8.08	30.71	23.92	95.	8.03	32.05	24.98	5.	8.29	30.82	23.98	90.	7.94	32.00	24.96
10.	7.92	30.95	24.14	100.	8.08	32.18	25.08	10.	8.22	30.90	24.05	95.	7.94	32.01	24.96
15.	7.91	30.99	24.17	105.	8.13	32.24	25.12	15.	7.97	31.13	24.27	100.	7.94	32.08	25.02
20.	7.85	31.13	24.29	110.	8.16	32.29	25.15	20.	7.98	31.21	24.33	105.	7.95	32.11	25.04
25.	7.83	31.22	24.36	115.	8.19	32.36	25.20	25.	7.96	31.36	24.45	110.	7.95	32.15	25.07
30.	7.83	31.33	24.44	120.	8.26	32.47	25.27	30.	7.95	31.41	24.49	115.	8.05	32.40	25.26
35.	7.83	31.41	24.51	125.	8.29	32.56	25.34	35.	7.94	31.55	24.60	120.	8.10	32.53	25.35
40.	7.82	31.46	24.55	130.	8.31	32.59	25.36	40.	7.93	31.60	24.65	125.	8.14	32.56	25.36
45.	7.82	31.54	24.61	135.	8.34	32.70	25.44	45.	7.93	31.65	24.68	130.	8.17	32.63	25.42
50.	7.83	31.63	24.68	140.	8.43	32.87	25.56	50.	7.93	31.67	24.69	135.	8.20	32.70	25.46
55.	7.87	31.70	24.73	145.	8.50	32.99	25.65	55.	7.93	31.68	24.70	140.	8.24	32.76	25.51
60.	7.88	31.74	24.76	150.	8.54	33.01	25.66	60.	7.93	31.79	24.79	145.	8.34	33.05	25.72
65.	7.90	31.80	24.81	155.	8.55	33.01	25.66	65.	7.93	31.81	24.81	150.	8.43	33.14	25.77
70.	7.91	31.81	24.81	160.	8.56	33.03	25.67	70.	7.94	31.81	24.80	155.	8.47	33.15	25.78
75.	7.92	31.85	24.84	165.	8.58	33.04	25.68	75.	7.94	31.83	24.82	160.	8.56	33.15	25.77
80.	7.94	31.87	24.85	170.	8.58	33.05	25.68	80.	7.94	31.93	24.90	165.	8.57	33.16	25.77

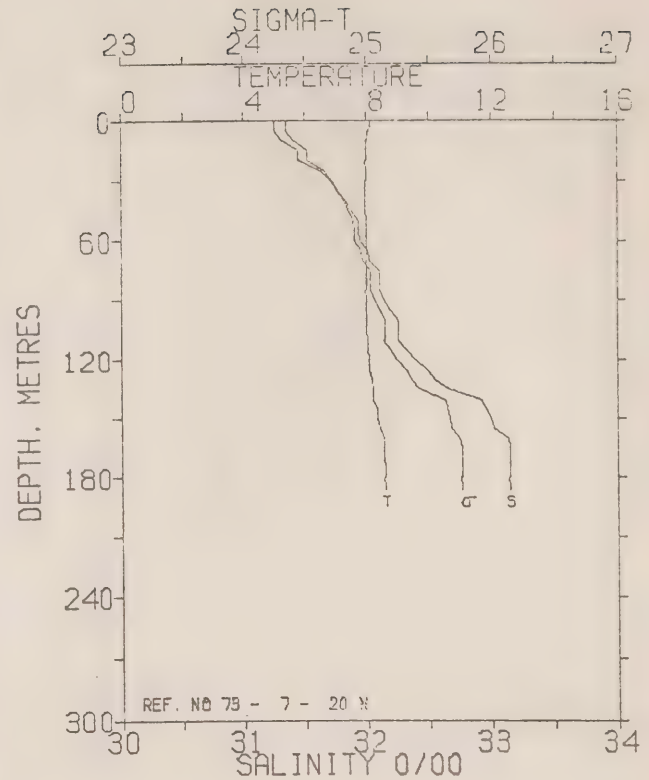




REFERENCE NO. 73-7-19 STN- JF4 DATE 6/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 23.0  
 RESULTS OF STD CAST 88 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA	SVA	DELTA	POT EN	SOUND
			T		D		VEL
0	8.27	30.81	23.98	394.0	0.0	0.0	1479.
10	8.02	31.00	24.16	376.9	0.39	0.02	1478.
20	7.93	31.22	24.35	359.6	0.75	0.08	1478.
30	7.86	31.37	24.47	347.6	1.11	0.17	1478.
50	7.86	31.66	24.70	326.6	1.77	0.44	1479.
75	7.93	31.86	24.85	312.5	2.58	0.95	1480.
100	8.06	32.09	25.01	297.7	3.34	1.62	1481.
125	8.24	32.49	25.29	271.1	4.04	2.43	1483.
150	8.54	33.02	25.66	236.6	4.68	3.32	1485.
175	8.57	33.04	25.67	235.6	5.27	4.30	1485.

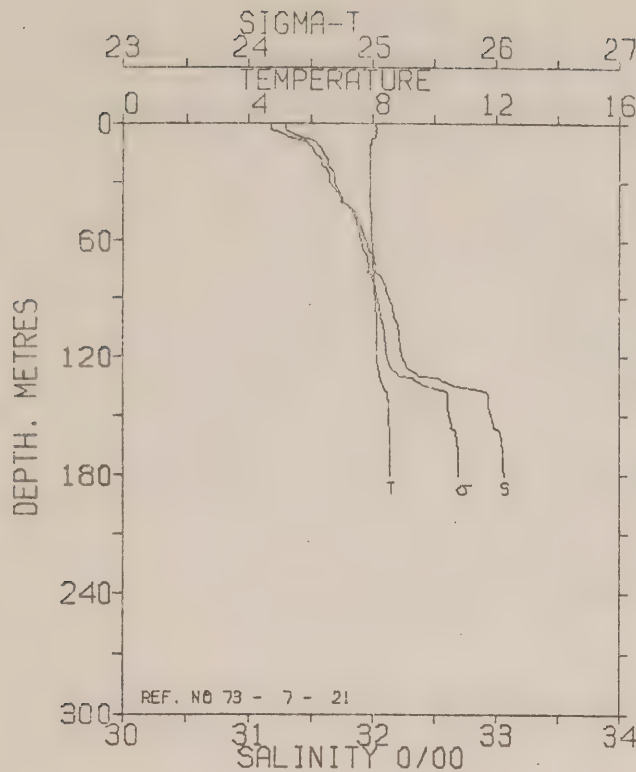
DEPTH	TEMP	SAL	SIGMA	DEPTH	TEMP	SAL	SIGMA
			T				T
0.	8.27	30.81	23.98	90.	8.02	31.99	24.94
5.	8.17	30.89	24.05	95.	8.04	32.06	24.99
10.	8.02	31.00	24.16	100.	8.06	32.09	25.01
15.	7.94	31.14	24.28	105.	8.08	32.14	25.04
20.	7.93	31.22	24.35	110.	8.17	32.35	25.19
25.	7.88	31.29	24.41	115.	8.18	32.38	25.21
30.	7.86	31.37	24.47	120.	8.20	32.43	25.25
35.	7.84	31.48	24.56	125.	8.24	32.49	25.29
40.	7.86	31.57	24.63	130.	8.28	32.58	25.36
45.	7.86	31.64	24.69	135.	8.33	32.65	25.41
50.	7.86	31.66	24.70	140.	8.37	32.74	25.47
55.	7.86	31.68	24.71	145.	8.50	32.91	25.59
60.	7.86	31.72	24.74	150.	8.54	33.02	25.66
65.	7.87	31.76	24.78	155.	8.55	33.02	25.66
70.	7.90	31.78	24.79	160.	8.56	33.03	25.67
75.	7.93	31.86	24.85	165.	8.57	33.04	25.68
80.	7.99	31.94	24.90	170.	8.57	33.04	25.68
85.	8.00	31.95	24.91	175.	8.57	33.04	25.67



REFERENCE NO. 73-7-20 STN- JF4 \* DATE 6/ 3/73  
 POSITION 48-17.7N, 124- 4.4W PST 23.5  
 RESULTS OF STD CAST 39 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA	SVA	DELTA	POT EN	SOUND
			T		D		VEL
0	8.10	31.25	24.35	359.1	0.0	0.0	1478.
10	7.97	31.30	24.40	354.3	0.36	0.02	1478.
20	7.96	31.45	24.52	342.9	0.70	0.07	1478.
30	7.95	31.70	24.72	323.8	1.04	0.16	1479.
50	7.96	31.93	24.90	307.5	1.67	0.41	1480.
75	7.96	32.10	25.03	295.2	2.43	0.50	1480.
100	7.98	32.26	25.15	284.2	3.16	1.55	1481.
125	8.08	32.48	25.31	269.0	3.86	2.35	1482.
150	8.35	33.00	25.67	235.2	4.48	3.22	1486.
175	8.57	33.15	25.76	227.6	5.06	4.18	1486.

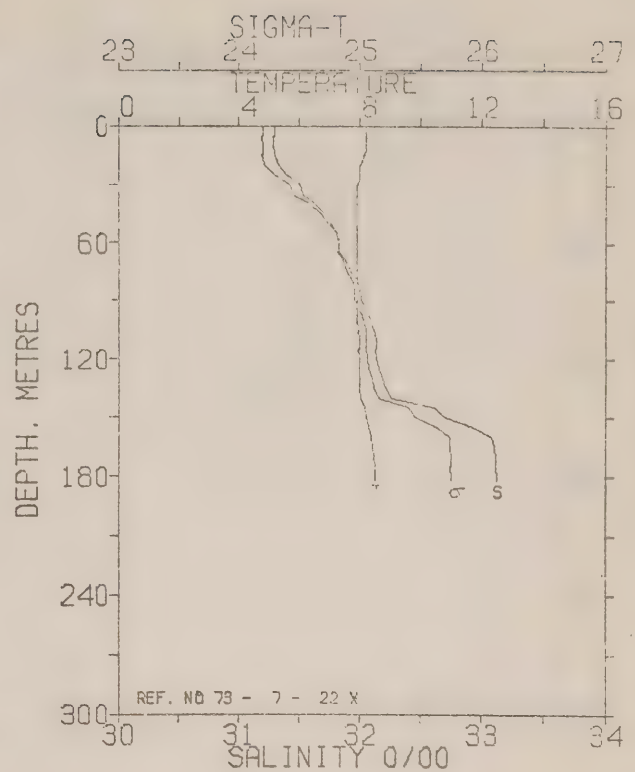
DEPTH	TEMP	SAL	SIGMA	DEPTH	TEMP	SAL	SIGMA
			T				T
0.	8.10	31.25	24.35	95.	7.97	32.19	25.10
5.	8.06	31.25	24.35	100.	7.98	32.26	25.15
10.	7.97	31.30	24.40	105.	7.99	32.26	25.15
15.	7.97	31.44	24.51	110.	8.05	32.26	25.14
20.	7.96	31.45	24.52	115.	8.06	32.22	25.19
25.	7.96	31.62	24.65	120.	8.07	32.29	25.24
30.	7.95	31.70	24.72	125.	8.08	32.48	25.31
35.	7.95	31.76	24.76	130.	8.16	32.56	25.36
40.	7.95	31.83	24.82	135.	8.19	32.65	25.43
45.	7.95	31.87	24.85	140.	8.21	32.62	25.64
50.	7.96	31.93	24.90	145.	8.32	32.66	25.65
55.	7.96	31.93	24.90	150.	8.35	33.00	25.67
60.	7.97	31.94	24.90	155.	8.41	33.02	25.68
65.	7.96	32.01	24.96	160.	8.56	33.13	25.75
70.	7.97	32.02	24.97	165.	8.57	33.15	25.76
75.	7.96	32.10	25.03	170.	8.57	33.15	25.76
80.	7.97	32.10	25.03	175.	8.57	33.15	25.76
85.	7.96	32.11	25.04	180.	8.57	33.14	25.75
90.	7.97	32.14	25.06	185.	8.58	33.15	25.76



REFERENCE NO. 73- 7- 21 STN- JF4 DATE 7/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 0.1  
 RESULTS OF STD CAST 68 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA	SVA	DELTA	POT EN	SOUND
			T		D		VEL
0	8.09	31.18	24.29	364.0	0.0	0.0	1478.
10	7.94	31.47	24.54	341.2	0.36	0.02	1478.
20	7.92	31.59	24.63	332.2	0.69	0.07	1478.
30	7.90	31.65	24.69	327.3	1.02	0.15	1479.
50	7.94	31.89	24.87	310.3	1.66	0.41	1479.
75	7.99	32.02	24.96	301.3	2.42	0.90	1480.
100	8.10	32.17	25.06	292.2	3.16	1.56	1481.
125	8.15	32.27	25.13	286.2	3.89	2.39	1482.
150	8.51	32.96	25.62	240.5	4.52	3.28	1485.
175	8.55	33.05	25.69	234.6	5.12	4.26	1485.

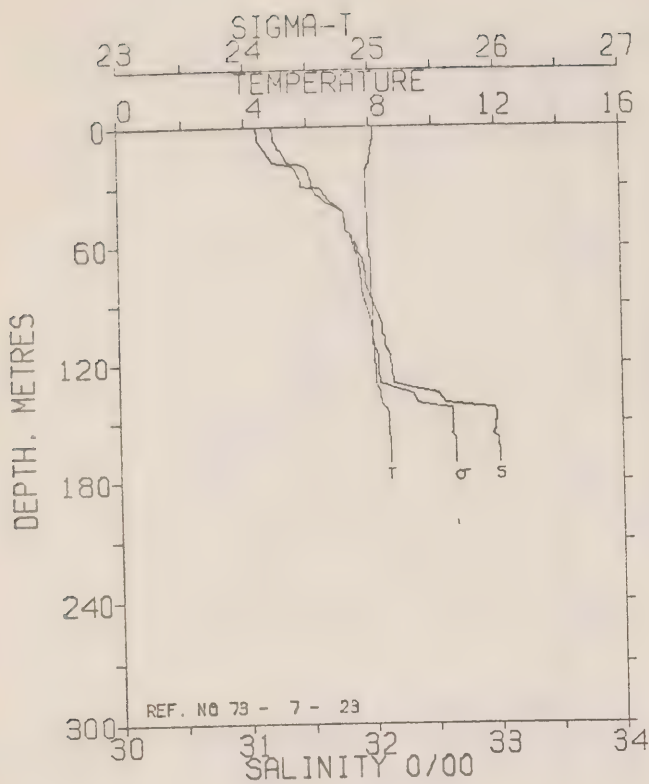
DEPTH	TEMP	SAL	SIGMA	DEPTH	TEMP	SAL	SIGMA
			T				T
0.	8.09	31.18	24.29	95.	8.08	32.15	25.05
5.	8.10	31.27	24.36	100.	8.10	32.17	25.06
10.	7.94	31.47	24.54	105.	8.11	32.20	25.09
15.	7.92	31.53	24.59	110.	8.12	32.21	25.09
20.	7.92	31.59	24.63	115.	8.13	32.21	25.09
25.	7.91	31.64	24.68	120.	8.11	32.23	25.11
30.	7.90	31.65	24.69	125.	8.15	32.27	25.13
35.	7.90	31.71	24.73	130.	8.20	32.38	25.21
40.	7.90	31.74	24.75	135.	8.32	32.67	25.42
45.	7.93	31.84	24.83	140.	8.48	32.94	25.61
50.	7.94	31.89	24.87	145.	8.50	32.93	25.60
55.	7.95	31.92	24.89	150.	8.47	32.97	25.64
60.	7.95	31.95	24.91	155.	8.52	32.93	25.60
65.	7.97	31.97	24.93	160.	8.55	33.04	25.68
70.	7.99	32.02	24.96	165.	8.55	33.05	25.69
75.	7.99	32.02	24.96	170.	8.55	33.05	25.69
80.	8.04	32.07	25.00	175.	8.55	33.04	25.68
85.	8.05	32.10	25.02	180.	8.56	33.06	25.69



REFERENCE NO. 73- 7- 22 STN- JF4 \* DATE 7/ 3/73  
 POSITION 48-17.7N, 124- 4.4W PST 0.6  
 RESULTS OF STD CAST 38 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA	SVA	DELTA	POT EN	SOUND
			T		D		VEL
0	8.18	31.20	24.29	364.3	0.0	0.0	1479.
10	8.18	31.19	24.29	364.8	0.36	0.02	1479.
20	7.99	31.21	24.33	361.0	0.73	0.07	1478.
30	7.93	31.43	24.51	344.2	1.08	0.16	1478.
50	7.91	31.74	24.76	320.7	1.75	0.43	1479.
75	7.92	31.92	24.90	307.9	2.53	0.93	1480.
100	7.93	32.09	25.02	296.1	3.29	1.61	1480.
125	7.98	32.16	25.07	292.0	4.02	2.45	1481.
150	8.22	32.70	25.46	255.3	4.72	3.42	1483.
175	8.50	33.12	25.74	229.0	5.30	4.39	1485.

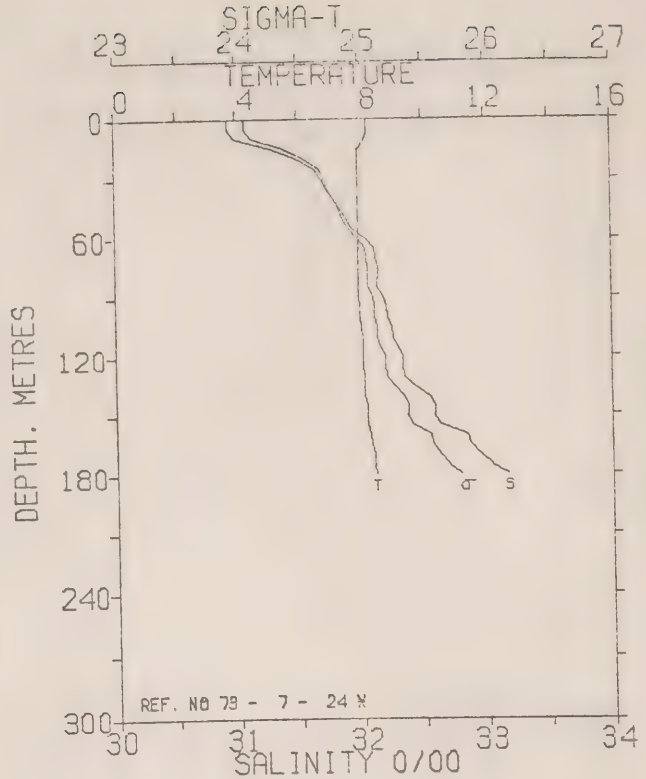
DEPTH	TEMP	SAL	SIGMA	DEPTH	TEMP	SAL	SIGMA
			T				T
0.	8.18	31.20	24.29	95.	7.92	32.66	25.00
5.	8.18	31.19	24.28	100.	7.93	32.69	25.02
10.	8.18	31.19	24.29	105.	7.95	32.12	25.04
15.	8.11	31.19	24.30	110.	7.97	32.13	25.05
20.	7.99	31.21	24.33	115.	7.96	32.12	25.05
25.	8.00	31.30	24.39	120.	7.97	32.14	25.06
30.	7.93	31.43	24.51	125.	7.98	32.16	25.07
35.	7.92	31.45	24.52	130.	8.00	32.20	25.10
40.	7.91	31.58	24.63	135.	8.01	32.21	25.11
45.	7.91	31.68	24.71	140.	8.03	32.27	25.15
50.	7.91	31.74	24.76	145.	8.16	32.62	25.41
55.	7.92	31.81	24.81	150.	8.22	32.70	25.46
60.	7.92	31.83	24.82	155.	8.31	32.93	25.63
65.	7.92	31.83	24.82	160.	8.36	33.08	25.74
70.	7.92	31.89	24.87	165.	8.42	33.11	25.75
75.	7.92	31.92	24.90	170.	8.45	33.12	25.76
80.	7.93	31.98	24.94	175.	8.50	33.12	25.74
85.	7.92	31.99	24.95	180.	8.51	33.13	25.75



REFERENCE NO. 73-7-23 STN- JF4 DATE 7/3/73  
 POSITION 48-18.2N, 124-4.5W PST 1.0  
 RESULTS OF STD CAST 69 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.11	31.09	24.22	371.0	0.0	0.0	1478.
5	8.05	31.13	24.26	367.6	0.37	0.02	1478.
10	7.89	31.38	24.48	347.0	0.73	0.07	1478.
20	7.86	31.45	24.53	341.7	1.07	0.16	1478.
30	7.89	31.79	24.80	316.8	1.72	0.43	1479.
50	7.97	31.95	24.91	306.3	2.50	0.92	1480.
75	8.04	32.08	25.00	298.2	3.26	1.59	1481.
100	8.10	32.16	25.06	293.4	4.00	2.44	1482.
125	8.50	32.97	25.63	239.1	4.66	3.37	1485.

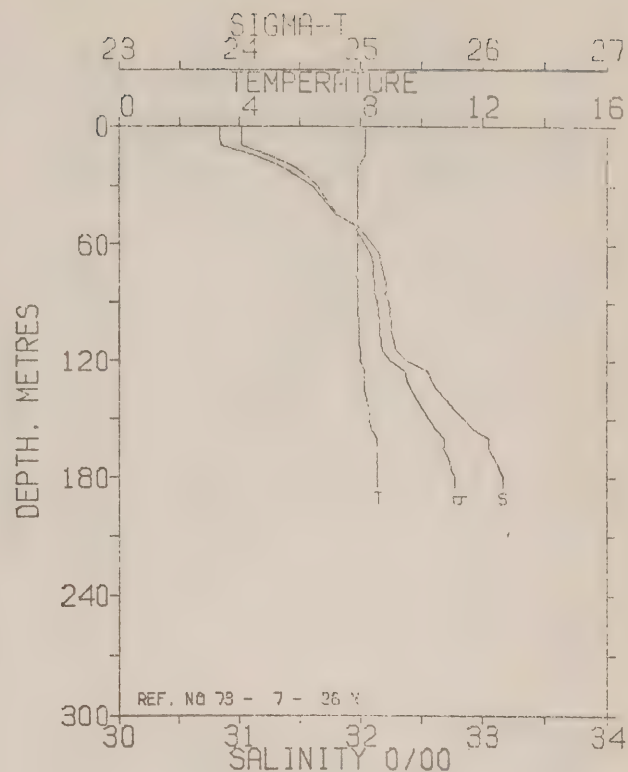
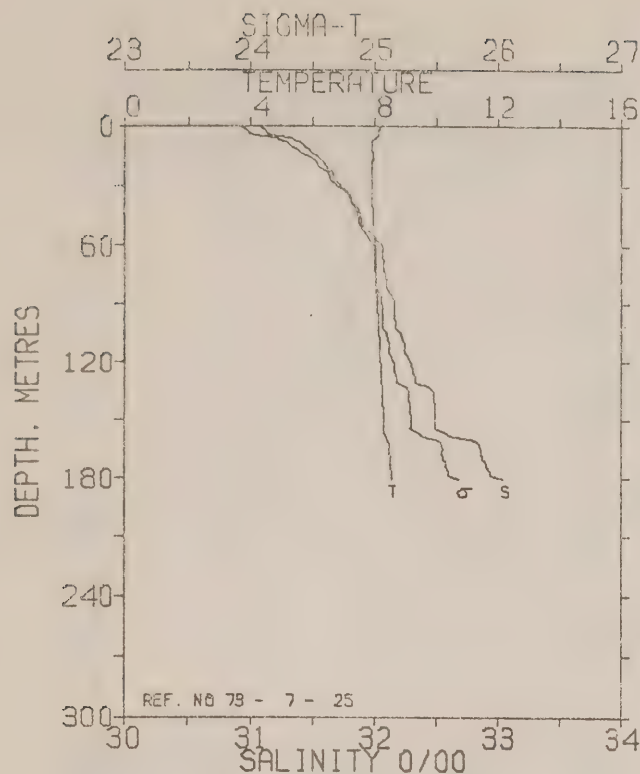
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.11	31.09	24.22	90.	8.02	32.02	24.96
5.	8.11	31.10	24.23	95.	8.03	32.05	24.98
10.	8.05	31.13	24.26	100.	8.04	32.08	25.00
15.	8.00	31.20	24.32	105.	8.06	32.09	25.01
20.	7.89	31.38	24.48	110.	8.07	32.10	25.01
25.	7.86	31.42	24.51	115.	8.08	32.14	25.04
30.	7.86	31.45	24.53	120.	8.09	32.15	25.05
35.	7.86	31.60	24.65	125.	8.10	32.16	25.06
40.	7.87	31.70	24.73	130.	8.11	32.18	25.07
45.	7.89	31.78	24.79	135.	8.26	32.53	25.32
50.	7.89	31.79	24.80	140.	8.30	32.59	25.36
55.	7.90	31.85	24.84	145.	8.50	32.58	25.64
60.	7.93	31.88	24.86	150.	8.50	32.97	25.63
65.	7.95	31.92	24.89	155.	8.49	32.94	25.61
70.	7.97	31.94	24.90	160.	8.53	33.00	25.65
75.	7.97	31.95	24.91	165.	8.53	33.01	25.66
80.	7.98	31.97	24.92	170.	8.53	33.01	25.66



REFERENCE NO. 73-7-24 STN- JF4 \* DATE 7/3/73  
 POSITION 48-17.7N, 124-4.4W PST 1.6  
 RESULTS OF STD CAST 37 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.24	30.93	24.07	385.1	0.0	0.0	1479.
5	8.15	30.98	24.13	380.1	0.38	0.02	1478.
10	7.95	31.49	24.56	335.5	0.74	0.07	1478.
20	7.95	31.69	24.71	325.2	1.07	0.16	1479.
30	7.96	31.88	24.86	310.9	1.71	0.42	1480.
50	7.95	32.14	25.07	291.7	2.46	0.89	1480.
75	8.00	32.23	25.12	286.8	3.18	1.54	1481.
100	8.09	32.34	25.20	279.8	3.89	2.35	1482.
125	8.21	32.58	25.37	263.8	4.57	3.20	1483.
150	8.41	33.04	25.70	233.2	5.18	4.32	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.24	30.93	24.07	90.	7.96	32.19	25.10
5.	8.23	30.92	24.07	95.	7.58	32.21	25.11
10.	8.15	30.98	24.13	100.	8.00	32.23	25.12
15.	7.93	31.28	24.39	105.	8.02	32.25	25.14
20.	7.95	31.49	24.56	110.	8.09	32.26	25.14
25.	7.94	31.64	24.67	115.	8.09	32.29	25.16
30.	7.95	31.69	24.71	120.	8.09	32.34	25.20
35.	7.95	31.73	24.74	125.	8.09	32.34	25.20
40.	7.95	31.78	24.78	130.	8.10	32.35	25.21
45.	7.95	31.84	24.83	135.	8.11	32.42	25.26
50.	7.96	31.88	24.86	140.	8.14	32.55	25.36
55.	7.95	31.93	24.90	145.	8.19	32.59	25.38
60.	7.96	32.05	24.99	150.	8.21	32.58	25.37
65.	7.96	32.11	25.04	155.	8.22	32.63	25.41
70.	7.95	32.13	25.05	160.	8.30	32.85	25.57
75.	7.95	32.14	25.07	165.	8.35	32.87	25.58
80.	7.96	32.14	25.06	170.	8.39	32.95	25.63
85.	7.95	32.14	25.06	175.	8.41	33.04	25.70



REFERENCE NO. 73-7-25 STN- JF4 DATE 7/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 1.9  
 RESULTS OF STD CAST 91 POINTS TAKEN FROM ANALOG TRACE

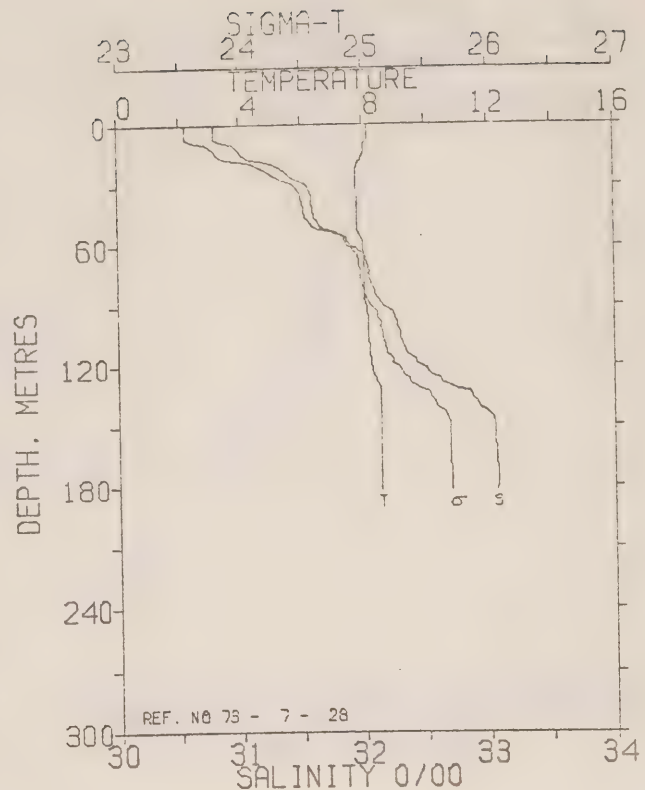
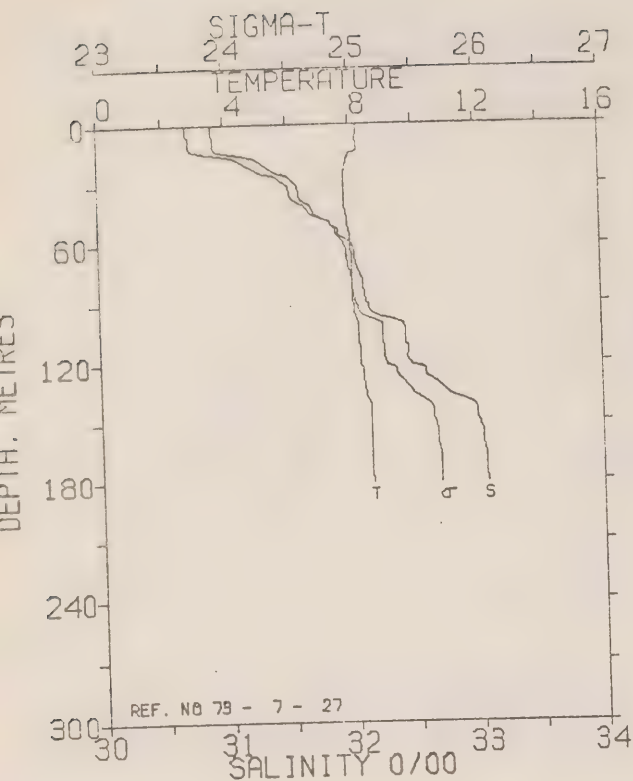
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.15	30.91	24.07	384.9	0.0	0.0	1478.
10	7.91	31.31	24.42	352.4	0.37	0.02	1478.
20	7.92	31.54	24.60	335.5	0.71	0.07	1478.
30	7.90	31.69	24.72	323.9	1.04	0.15	1479.
50	7.95	31.91	24.88	309.2	1.67	0.41	1480.
75	8.04	32.09	25.01	297.4	2.42	0.89	1481.
100	8.11	32.17	25.06	292.4	3.16	1.54	1481.
125	8.19	32.31	25.18	283.7	3.88	2.37	1482.
150	8.28	32.49	25.29	271.6	4.56	3.33	1483.
175	8.51	32.91	25.58	244.4	5.20	4.39	1485.

REFERENCE NO. 73-7-26 STN- JF4 \* DATE 7/ 3/73  
 POSITION 48-17.7N, 124- 4.4W PST 2.5  
 RESULTS OF STD CAST 38 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.15	30.84	24.02	390.4	0.0	0.0	1478.
10	8.17	30.85	24.02	390.4	0.39	0.02	1478.
20	7.88	31.33	24.44	350.3	0.76	0.08	1478.
30	7.89	31.60	24.65	330.7	1.10	0.16	1479.
50	7.89	31.97	24.94	303.5	1.74	0.42	1479.
75	7.88	32.18	25.11	287.8	2.47	0.89	1480.
100	7.94	32.25	25.15	283.9	3.19	1.53	1481.
125	8.11	32.55	25.36	264.3	3.89	2.33	1482.
150	8.30	32.65	25.56	245.7	4.53	3.22	1484.
175	8.57	33.13	25.75	228.7	5.12	4.20	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.15	30.91	24.07	95.	8.10	32.16	25.06	0.	8.15	30.84	24.02	95.	7.92	32.25	25.15
5.	8.09	31.09	24.22	100.	8.11	32.17	25.06	5.	8.17	30.84	24.02	100.	7.94	32.25	25.15
10.	7.91	31.31	24.42	105.	8.12	32.21	25.09	10.	8.17	30.85	24.02	105.	7.95	32.25	25.15
15.	7.94	31.45	24.52	110.	8.15	32.24	25.11	15.	8.10	31.13	24.25	110.	7.95	32.27	25.17
20.	7.92	31.54	24.60	115.	8.16	32.25	25.12	20.	7.88	31.33	24.44	115.	7.97	32.29	25.18
30.	7.90	31.63	24.67	120.	8.17	32.29	25.15	25.	7.88	31.48	24.56	120.	8.00	32.39	25.25
35.	7.90	31.69	24.72	125.	8.19	32.31	25.16	30.	7.89	31.60	24.65	125.	8.11	32.55	25.36
40.	7.91	31.79	24.80	130.	8.20	32.34	25.18	35.	7.89	31.67	24.70	130.	8.13	32.59	25.39
45.	7.93	31.83	24.83	135.	8.26	32.48	25.28	40.	7.88	31.74	24.76	135.	8.14	32.62	25.41
50.	7.94	31.88	24.86	140.	8.27	32.48	25.28	45.	7.88	31.80	24.81	140.	8.23	32.71	25.47
55.	7.95	31.91	24.88	145.	8.28	32.48	25.28	50.	7.89	31.97	24.94	145.	8.28	32.77	25.51
60.	8.00	32.01	24.95	150.	8.28	32.49	25.29	55.	7.89	32.03	24.98	150.	8.30	32.85	25.56
65.	8.02	32.06	24.99	155.	8.29	32.51	25.30	60.	7.89	32.10	25.04	155.	8.35	32.93	25.62
70.	8.03	32.07	24.99	160.	8.40	32.74	25.46	65.	7.89	32.16	25.08	160.	8.52	33.05	25.69
75.	8.03	32.07	24.99	165.	8.47	32.86	25.55	70.	7.89	32.17	25.10	165.	8.57	33.05	25.68
80.	8.04	32.09	25.01	170.	8.49	32.87	25.55	75.	7.88	32.18	25.11	170.	8.56	33.10	25.72
85.	8.04	32.09	25.01	175.	8.51	32.91	25.58	80.	7.89	32.21	25.12	175.	8.57	33.13	25.75
	8.08	32.13	25.04	180.	8.55	32.99	25.64	85.	7.91	32.20	25.12	180.	8.57	33.16	25.77





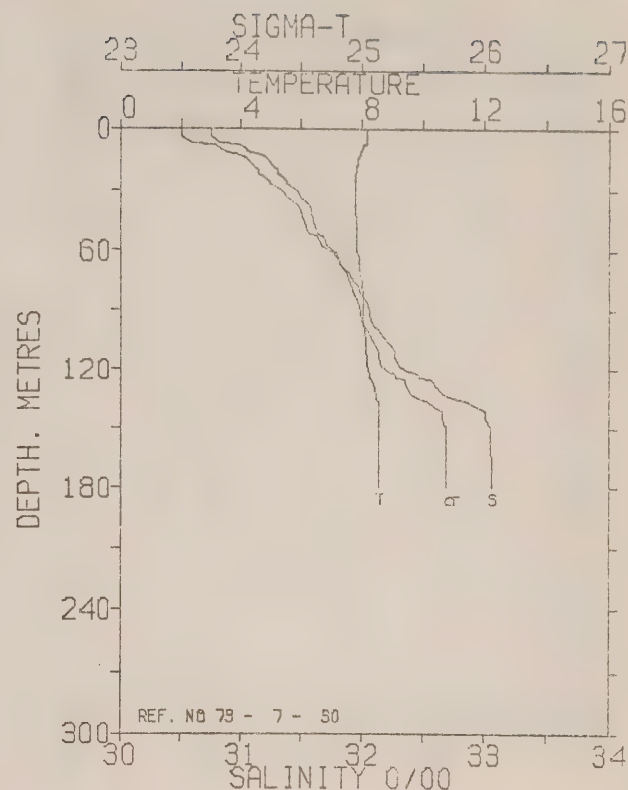
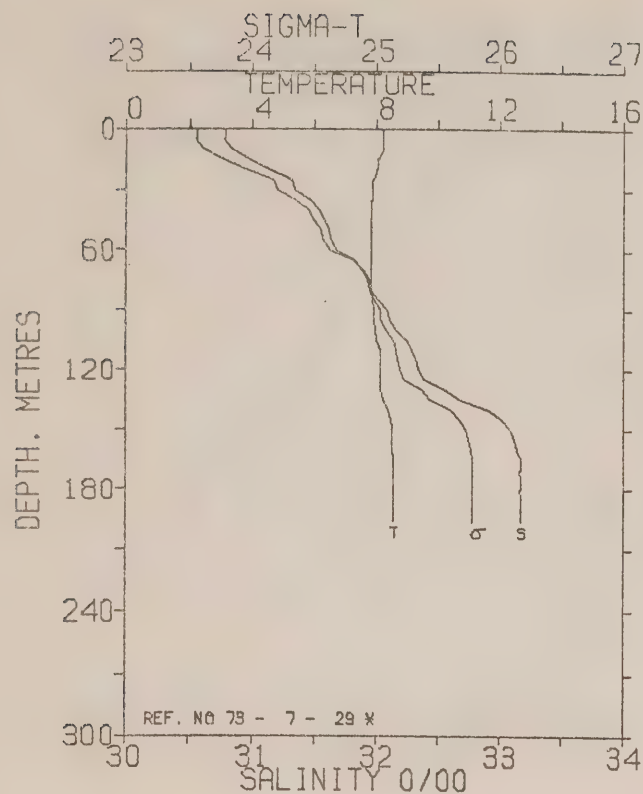
REFERENCE NO. 73-7-27 STN- JF4 DATE 7/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 3.2  
 RESULTS OF STD CAST 86 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.23	30.70	23.90	401.7	0.0	0.0	1478.
10	8.23	30.72	23.91	400.6	0.40	0.02	1478.
20	7.87	31.16	24.31	363.2	0.79	0.08	1478.
30	7.83	31.49	24.57	338.3	1.14	0.17	1478.
40	7.93	31.84	24.83	313.6	1.79	0.44	1479.
50	8.04	32.07	25.00	298.5	2.55	0.92	1480.
75	8.19	32.41	25.24	275.7	3.29	1.57	1482.
100	8.32	32.58	25.35	265.1	3.97	2.36	1483.
125	8.54	33.00	25.65	237.5	4.59	3.23	1485.
150	8.54	33.00	25.65	237.5	4.59	3.23	1485.
175	8.57	33.05	25.69	234.5	5.18	4.20	1485.

REFERENCE NO. 73-7-28 STN- JF4 DATE 7/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 4.0  
 RESULTS OF STD CAST 83 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.15	30.55	23.79	411.8	0.0	0.0	1478.
10	8.05	30.72	23.94	398.2	0.41	0.02	1478.
20	7.82	31.12	24.28	365.6	0.80	0.08	1478.
30	7.79	31.45	24.54	340.7	1.15	0.17	1478.
40	7.80	31.59	24.65	330.9	1.82	0.44	1479.
50	8.03	32.05	24.98	300.2	2.59	0.93	1480.
75	8.15	32.28	25.14	284.9	3.33	1.59	1482.
100	8.33	32.55	25.33	267.9	4.02	2.38	1483.
125	8.54	33.05	25.69	233.8	4.64	3.25	1485.
150	8.56	33.07	25.70	233.2	5.23	4.22	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.23	30.70	23.90	90.	8.08	32.14	25.04	0.	8.15	30.55	23.79	95.	8.14	32.25	25.12
5.	8.23	30.70	23.90	95.	8.10	32.19	25.08	5.	8.15	30.55	23.79	100.	8.15	32.28	25.14
10.	8.23	30.72	23.91	100.	8.19	32.41	25.24	10.	8.05	30.72	23.94	105.	8.17	32.30	25.16
15.	7.97	30.88	24.07	105.	8.22	32.43	25.25	15.	7.99	30.81	24.02	110.	8.18	32.33	25.17
20.	7.87	31.16	24.31	110.	8.22	32.43	25.25	20.	7.82	31.12	24.28	115.	8.21	32.39	25.22
25.	7.83	31.32	24.44	115.	8.24	32.44	25.25	25.	7.79	31.26	24.40	120.	8.28	32.47	25.27
30.	7.83	31.49	24.57	120.	8.26	32.46	25.27	30.	7.79	31.45	24.54	125.	8.33	32.55	25.33
35.	7.83	31.52	24.59	125.	8.32	32.58	25.35	35.	7.80	31.50	24.58	130.	8.48	32.69	25.41
40.	7.83	31.59	24.65	130.	8.36	32.67	25.42	40.	7.80	31.51	24.59	135.	8.56	32.67	25.54
45.	7.86	31.68	24.71	135.	8.40	32.76	25.48	45.	7.80	31.51	24.59	140.	8.55	32.93	25.59
50.	7.93	31.84	24.83	140.	8.52	32.93	25.60	50.	7.80	31.59	24.65	145.	8.54	33.02	25.67
55.	7.96	31.91	24.88	145.	8.54	32.98	25.64	55.	7.91	31.83	24.82	150.	8.54	33.05	25.69
60.	8.00	32.01	24.95	150.	8.54	33.00	25.65	60.	7.98	31.91	24.87	155.	8.54	33.05	25.68
65.	8.01	32.02	24.96	155.	8.55	33.03	25.67	65.	8.02	32.02	24.96	160.	8.54	33.06	25.70
70.	8.02	32.04	24.97	160.	8.55	33.03	25.67	70.	8.03	32.04	24.98	165.	8.55	33.06	25.69
75.	8.04	32.07	25.00	165.	8.56	33.05	25.68	75.	8.03	32.05	24.98	170.	8.55	33.07	25.70
80.	8.05	32.09	25.01	170.	8.56	33.05	25.68	80.	8.05	32.07	25.00	175.	8.56	33.07	25.70
85.	8.06	32.10	25.02	175.	8.57	33.05	25.69	85.	8.06	32.10	25.02	180.	8.57	33.07	25.70



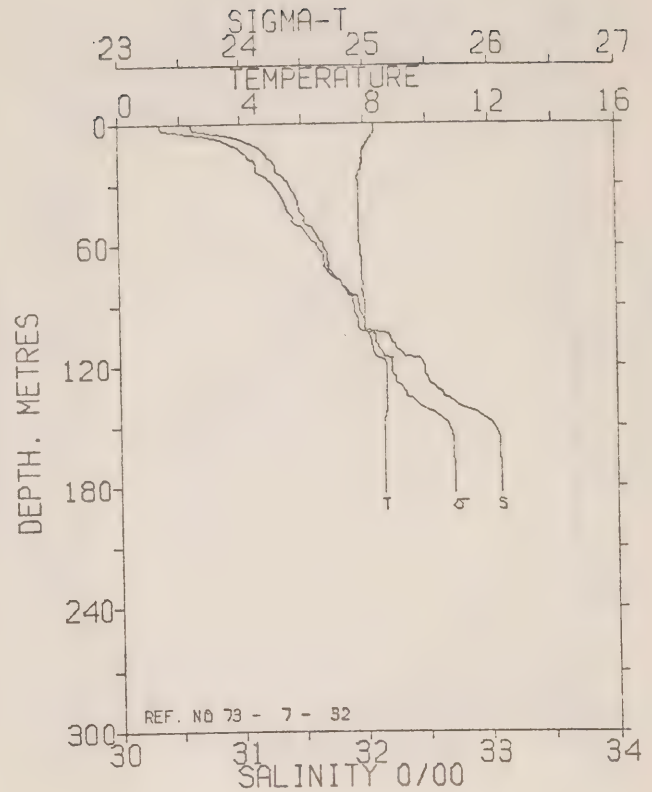
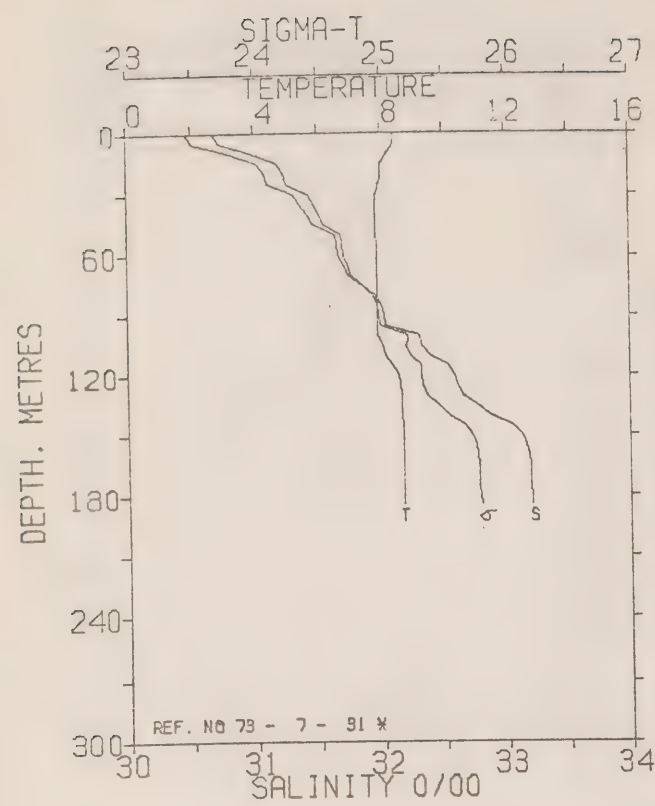
REFERENCE NO. 73-7-29 STN- JF4 \* DATE 7/3/73  
 POSITION 48-17.7N, 124-4.4W PST 4.6  
 RESULTS OF STD CAST 41 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA E	POT EN	SOUND VEL
0	8.22	30.56	23.78	412.6	0.0	0.0	1478.
10	8.22	30.60	23.82	409.5	0.41	0.02	1478.
20	7.96	30.95	24.13	380.3	0.81	0.08	1478.
30	7.86	31.20	24.34	360.1	1.17	0.17	1478.
50	7.83	31.55	24.61	334.4	1.86	0.45	1479.
75	7.83	31.94	24.92	305.2	2.67	0.56	1479.
100	7.94	32.15	25.08	291.2	3.41	1.63	1481.
125	8.14	32.39	25.23	277.0	4.12	2.44	1482.
150	8.50	33.09	25.73	230.5	4.75	3.22	1485.
175	8.54	33.17	25.78	225.8	5.32	4.26	1485.

REFERENCE NO. 73-7-30 STN- JF4 DATE 7/3/73  
 POSITION 48-18.2N, 124-4.5W PST 5.0  
 RESULTS OF STD CAST 88 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA E	POT EN	SOUND VEL
0	8.16	30.50	23.75	415.7	0.0	0.0	1478.
10	7.99	30.83	24.03	389.5	0.41	0.02	1478.
20	7.82	31.14	24.30	364.0	0.78	0.08	1478.
30	7.78	31.34	24.46	348.8	1.14	0.17	1478.
50	7.80	31.55	24.62	333.9	1.82	0.44	1478.
75	7.99	31.92	24.89	308.8	2.62	0.55	1480.
100	8.08	32.13	25.04	294.7	3.37	1.62	1481.
125	8.30	32.57	25.35	266.0	4.08	2.44	1483.
150	8.55	33.05	25.69	233.9	4.70	3.31	1485.
175	8.55	33.06	25.69	233.9	5.29	4.28	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.22	30.56	23.78	100.	7.94	32.15	25.08	0.	8.16	30.50	23.75	85.	8.03	32.03	24.96
5.	8.22	30.55	23.78	105.	7.99	32.24	25.14	5.	8.16	30.53	23.77	90.	8.04	32.06	24.98
10.	8.22	30.60	23.82	110.	8.11	32.28	25.17	10.	7.99	30.83	24.03	95.	8.05	32.07	24.99
15.	8.06	30.76	23.96	115.	8.13	32.32	25.17	15.	7.86	31.05	24.22	100.	8.08	32.13	25.04
20.	7.96	30.95	24.13	120.	8.14	32.34	25.19	20.	7.82	31.14	24.30	105.	8.11	32.20	25.08
25.	7.88	31.17	24.31	125.	8.14	32.39	25.23	25.	7.78	31.22	24.37	110.	8.14	32.26	25.13
30.	7.86	31.20	24.34	130.	8.14	32.57	25.37	30.	7.78	31.34	24.46	115.	8.15	32.28	25.14
35.	7.84	31.35	24.46	135.	8.21	32.65	25.43	35.	7.78	31.43	24.53	120.	8.18	32.34	25.18
40.	7.84	31.44	24.53	140.	8.37	32.91	25.60	40.	7.79	31.50	24.58	125.	8.30	32.57	25.35
45.	7.84	31.48	24.56	145.	8.45	33.02	25.67	45.	7.80	31.52	24.60	130.	8.40	32.63	25.38
50.	7.83	31.55	24.61	150.	8.50	33.09	25.73	50.	7.80	31.55	24.62	135.	8.48	32.79	25.49
55.	7.82	31.56	24.63	155.	8.50	33.11	25.74	55.	7.83	31.64	24.69	140.	8.56	32.57	25.62
60.	7.82	31.63	24.68	160.	8.52	33.14	25.76	60.	7.83	31.74	24.76	145.	8.55	33.01	25.66
65.	7.83	31.80	24.82	165.	8.53	33.16	25.78	65.	7.90	31.81	24.81	150.	8.55	33.05	25.69
70.	7.84	31.89	24.88	170.	8.54	33.16	25.77	70.	7.92	31.87	24.86	155.	8.55	33.05	25.69
75.	7.83	31.94	24.92	175.	8.54	33.17	25.78	75.	7.99	31.92	24.89	160.	8.40	33.06	25.72
80.	7.85	31.96	24.94	180.	8.55	33.16	25.77	80.	8.01	31.98	24.93	165.	8.56	33.06	25.69
85.	7.88	32.01	24.97	185.	8.54	33.17	25.78								
90.	7.91	32.09	25.03	190.	8.55	33.17	25.78								
95.	7.93	32.10	25.04	195.	8.55	33.17	25.78								



REFERENCE NO. 73- 7- 31 STN- JF4 \* DATE 7/ 3/73  
POSITION 48-17.7N, 124- 4.4W PST 5.7  
RESULTS OF STD CAST 38 POINTS TAKEN FROM ANALOG TRACE

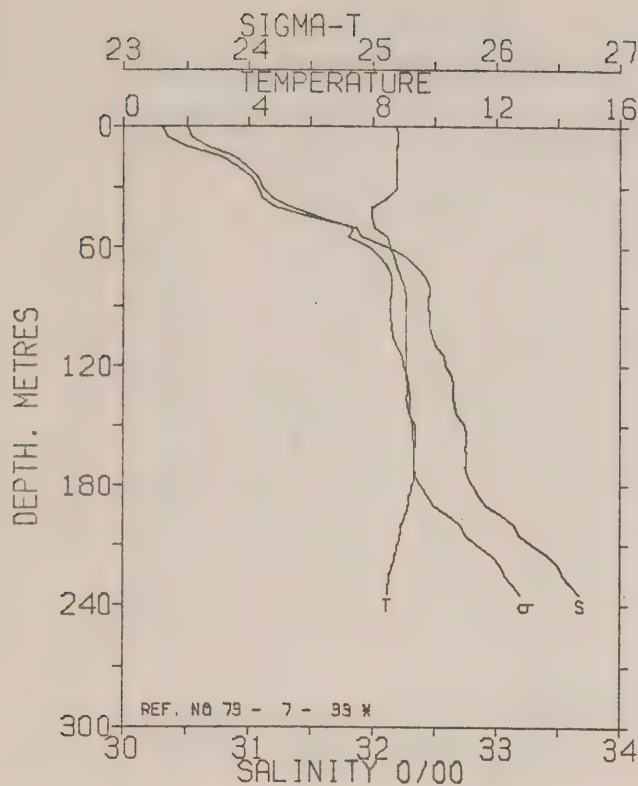
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA σ	POT EN	SOUND VEL
0	8.41	30.46	23.68	422.5	0.0	0.0	1479.
10	8.22	30.78	23.96	396.5	0.41	0.02	1478.
20	7.99	31.08	24.23	370.7	0.79	0.08	1478.
30	7.85	31.30	24.42	352.5	1.16	0.17	1478.
50	7.84	31.63	24.68	328.1	1.85	0.45	1479.
75	7.86	31.85	24.85	312.5	2.65	0.97	1479.
100	7.86	32.31	25.21	278.7	3.41	1.63	1481.
125	8.59	32.60	25.33	267.6	4.09	2.42	1484.
150	8.68	33.13	25.73	230.5	4.72	3.29	1486.
175	8.68	33.20	25.78	225.8	5.28	4.23	1486.

REFERENCE NO. 73- 7- 32 STN- JF4 DATE 7/ 3/73  
POSITION 48-18.2N, 124- 4.5W PST 6.0  
RESULTS OF STD CAST 96 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA σ	POT EN	SOUND VEL
0	8.34	30.34	23.60	430.0	0.0	0.0	1478.
10	8.07	30.89	24.07	385.9	0.41	0.02	1478.
20	7.90	31.12	24.27	366.6	0.79	0.08	1478.
30	7.81	31.26	24.39	355.2	1.15	0.17	1478.
50	7.85	31.45	24.53	342.1	1.84	0.45	1479.
75	7.90	31.73	24.75	321.6	2.67	0.98	1480.
100	7.97	31.99	24.94	303.9	3.44	1.67	1481.
125	8.66	32.50	25.24	276.5	4.16	2.49	1484.
150	8.58	33.03	25.67	235.8	4.81	3.39	1485.
175	8.58	33.08	25.70	232.8	5.39	4.36	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.41	30.46	23.68	95.	7.86	32.03	24.99	0.	8.34	30.34	23.60	90.	7.97	31.95	24.91
5.	8.41	30.52	23.73	100.	7.86	32.31	25.21	5.	8.30	30.57	23.79	95.	7.97	31.97	24.93
10.	8.22	30.78	23.96	105.	8.03	32.32	25.19	10.	8.07	30.89	24.07	100.	7.97	31.99	24.94
15.	8.00	31.01	24.17	110.	8.13	32.39	25.23	15.	7.94	31.03	24.20	105.	8.13	32.19	25.08
20.	7.99	31.08	24.23	115.	8.31	32.52	25.31	20.	7.90	31.12	24.27	110.	8.22	32.24	25.10
25.	7.91	31.10	24.26	120.	8.56	32.59	25.32	25.	7.82	31.16	24.31	115.	8.33	32.32	25.15
30.	7.85	31.30	24.42	125.	8.59	32.60	25.33	30.	7.81	31.26	24.39	120.	8.70	32.48	25.22
35.	7.83	31.35	24.46	130.	8.60	32.65	25.36	35.	7.83	31.32	24.44	125.	8.66	32.50	25.24
40.	7.83	31.41	24.51	135.	8.60	32.75	25.44	40.	7.84	31.36	24.47	130.	8.66	32.57	25.29
45.	7.85	31.46	24.54	140.	8.64	32.88	25.54	45.	7.85	31.40	24.49	135.	8.67	32.63	25.34
50.	7.84	31.63	24.68	145.	8.67	33.04	25.66	50.	7.85	31.45	24.53	140.	8.70	32.77	25.44
55.	7.86	31.65	24.69	150.	8.68	33.13	25.73	55.	7.84	31.54	24.61	145.	8.59	32.94	25.60
60.	7.86	31.66	24.70	155.	8.68	33.16	25.75	60.	7.86	31.62	24.66	150.	8.58	33.03	25.67
65.	7.86	31.70	24.73	160.	8.68	33.18	25.77	65.	7.88	31.66	24.70	155.	8.58	33.07	25.70
70.	7.86	31.73	24.75	165.	8.68	33.19	25.77	70.	7.88	31.67	24.70	160.	8.58	33.07	25.70
75.	7.86	31.85	24.85	170.	8.68	33.19	25.77	75.	7.90	31.73	24.75	165.	8.58	33.08	25.71
80.	7.85	31.96	24.94	175.	8.68	33.20	25.78	80.	7.94	31.82	24.82	170.	8.58	33.08	25.71
85.	7.87	32.00	24.96	180.	8.68	33.21	25.79								

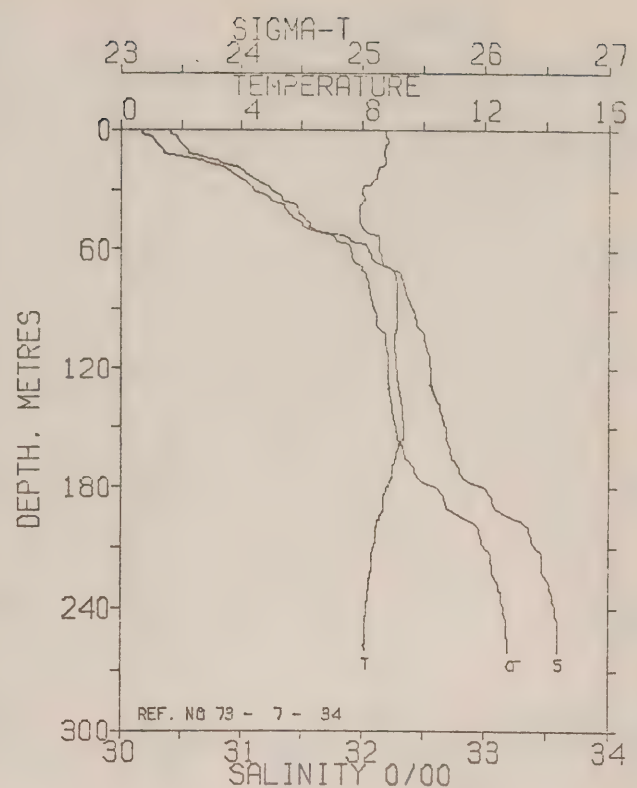




REFERENCE NO. 73-7-33 STN- JF1 \* DATE 7/ 3/73  
 POSITION 48-28.3N, 124-46.2W PST 19.4  
 RESULTS OF STD CAST 48 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA E	POT EN	SOUND VEL
0	8.79	30.31	23.51	439.0	0.0	0.0	1480.
10	8.77	30.49	23.65	425.7	0.43	0.02	1480.
20	8.74	30.91	23.98	394.1	0.84	0.08	1481.
30	8.74	31.06	24.11	382.5	1.23	0.18	1481.
50	8.06	31.86	24.83	314.1	1.94	0.47	1480.
75	8.91	32.43	25.14	284.5	2.69	0.94	1484.
100	9.07	32.46	25.14	284.8	3.40	1.58	1485.
125	9.08	32.64	25.28	272.1	4.10	2.38	1486.
150	9.26	32.75	25.34	267.4	4.78	3.33	1487.
175	9.30	32.76	25.34	267.4	5.45	4.44	1488.
200	8.90	33.14	25.70	233.8	6.08	5.65	1487.
225	8.51	33.53	26.07	199.1	6.62	6.82	1487.

DEPTH	TEMP	SAL	SIGMA T
0.	8.79	30.31	23.51
5.	8.79	30.35	23.54
10.	8.77	30.49	23.65
15.	8.74	30.77	23.88
20.	8.74	30.91	23.98
25.	8.74	31.02	24.07
30.	8.74	31.06	24.11
35.	8.40	31.11	24.19
40.	7.94	31.21	24.24
45.	7.95	31.50	24.56
50.	8.06	31.86	24.83
55.	8.48	31.90	24.79
60.	8.53	32.13	24.97
65.	8.66	32.26	25.05
70.	8.73	32.36	25.12
75.	8.91	32.43	25.14
80.	9.02	32.45	25.15
85.	9.05	32.44	25.13
90.	9.06	32.44	25.13
95.	9.06	32.45	25.14
100.	9.07	32.46	25.14
105.	9.06	32.48	25.16
110.	9.07	32.51	25.19

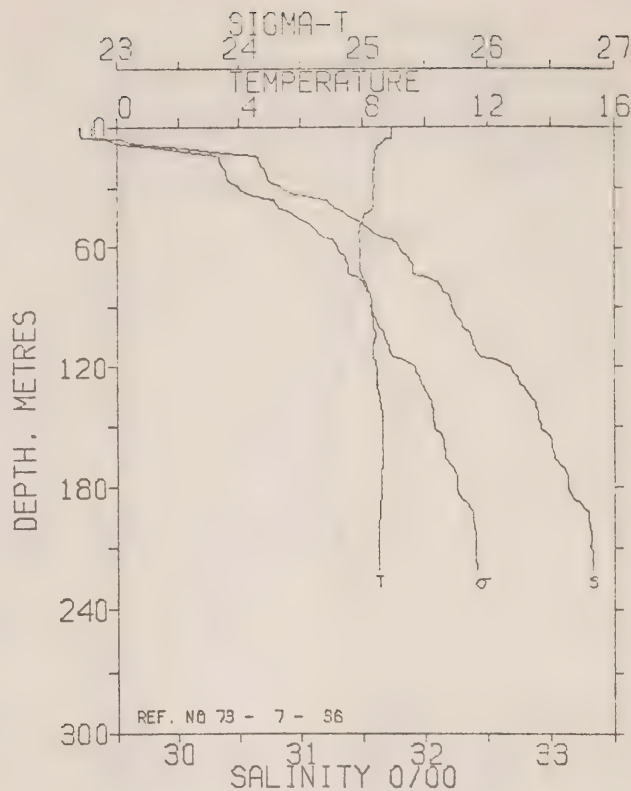


REFERENCE NO. 73-7-34 STN- JF1 DATE 7/ 3/73  
 POSITION 48-28.4N, 124-46.5W PST 20.0  
 RESULTS OF STD CAST 151 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA E	POT EN	SOUND VEL
0	8.78	30.17	23.40	448.8	0.0	0.0	1480.
10	8.72	30.34	23.54	435.8	0.44	0.02	1480.
20	8.50	30.90	24.01	391.2	0.86	0.09	1480.
30	8.00	31.11	24.25	368.9	1.24	0.18	1478.
50	8.07	31.59	24.61	334.4	1.94	0.47	1480.
75	9.12	32.33	25.04	294.6	2.71	0.95	1485.
100	9.12	32.47	25.14	284.8	3.43	1.60	1486.
125	9.16	32.56	25.21	279.5	4.13	2.40	1486.
150	9.35	32.69	25.28	272.7	4.82	3.37	1487.
175	8.94	32.83	25.45	256.6	5.49	4.48	1487.
200	8.43	33.36	25.95	210.4	6.07	5.59	1486.
225	8.22	33.50	26.09	197.3	6.58	6.69	1485.
250	8.08	33.59	26.18	186.9	7.06	7.86	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.78	30.17	23.40	135.	9.24	32.41	25.23
5.	8.82	30.28	23.48	140.	9.33	32.44	25.24
10.	8.72	30.34	23.54	145.	9.34	32.46	25.26
15.	8.74	30.67	23.80	150.	9.35	32.49	25.28
20.	8.50	30.90	24.01	155.	9.31	32.69	25.29
25.	8.35	31.03	24.14	160.	9.17	32.72	25.33
30.	8.00	31.11	24.25	165.	9.08	32.73	25.35
35.	8.05	31.24	24.34	170.	8.97	32.79	25.42
40.	7.89	31.37	24.47	175.	8.54	32.83	25.45
45.	7.90	31.46	24.53	180.	8.81	33.00	25.61
50.	8.07	31.59	24.61	185.	8.70	33.06	25.67
55.	8.56	31.90	24.78	190.	8.67	33.08	25.69
60.	8.61	32.05	24.90	195.	8.55	32.23	25.82
65.	8.61	32.09	24.93	200.	8.43	33.26	25.95
70.	8.99	32.24	24.99	205.	8.39	33.28	25.97
75.	9.12	32.33	25.04	210.	8.36	33.42	26.00
80.	9.14	32.35	25.05	215.	8.29	33.47	26.05
85.	9.14	32.38	25.07	220.	8.33	33.47	26.04
90.	9.14	32.41	25.10	225.	8.22	33.50	26.09
95.	9.14	32.44	25.12	230.	8.19	33.53	26.12
100.	9.12	32.47	25.14	235.	8.14	33.55	26.14
105.	9.07	32.51	25.18	240.	8.11	33.57	26.16
110.	9.07	32.53	25.20	245.	8.09	33.59	26.18
115.	9.11	32.55	25.21	250.	8.08	33.59	26.18
120.	9.11	32.56	25.21	255.	8.07	33.60	26.19
125.	9.16	32.56	25.21	260.	8.07	33.60	26.19





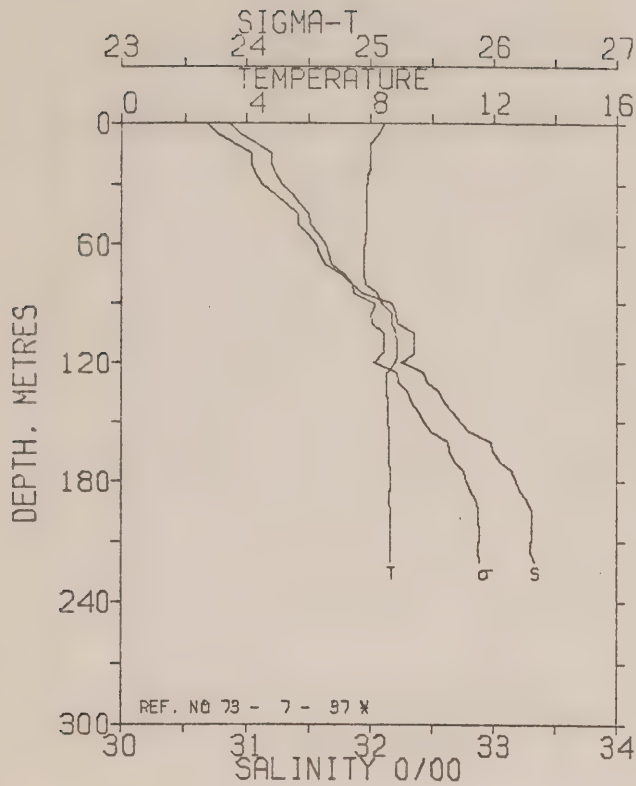
REFERENCE NO. 73-7-35 STN-JF2 \* DATE 7/3/73  
 POSITION 48-25.8N, 124-31.9W PST 21.2  
 RESULTS OF STD CAST 45 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	9.09	29.34	22.71	515.3	0.0	0.0	1480.
10	8.87	30.12	23.35	454.3	0.50	0.02	1480.
20	8.47	30.59	23.78	413.6	0.93	0.09	1479.
30	8.45	30.75	23.91	401.6	1.23	0.19	1480.
50	8.02	31.45	24.51	343.8	2.07	0.49	1479.
75	7.97	31.94	24.90	307.3	2.87	1.00	1480.
100	8.22	32.31	25.15	284.0	3.59	1.64	1482.
125	8.35	32.72	25.46	255.3	4.28	2.43	1483.
150	8.62	33.08	25.70	232.7	4.88	3.26	1485.
175	8.64	33.23	25.81	222.6	5.45	4.22	1486.
200	8.66	33.40	25.95	210.4	5.99	5.24	1487.

REFERENCE NO. 73-7-36 STN-JF2 DATE 7/3/73  
 POSITION 48-26.0N, 124-31.5W PST 21.5  
 RESULTS OF STD CAST 130 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.92	29.30	22.71	515.6	0.0	0.0	1479.
10	8.47	29.93	23.26	462.9	0.50	0.03	1478.
20	8.37	30.69	23.87	405.0	0.92	0.09	1479.
30	8.35	30.84	23.99	393.5	1.32	0.19	1479.
50	7.89	31.54	24.60	335.5	2.05	0.48	1479.
75	7.97	32.02	24.96	301.4	2.84	0.99	1480.
100	8.36	32.30	25.13	286.2	3.57	1.64	1482.
125	8.47	32.75	25.46	255.1	4.25	2.42	1484.
150	8.63	32.92	25.57	244.7	4.87	3.29	1485.
175	8.58	33.14	25.75	228.4	5.47	4.27	1486.
200	8.52	33.31	25.89	215.3	6.02	5.23	1486.

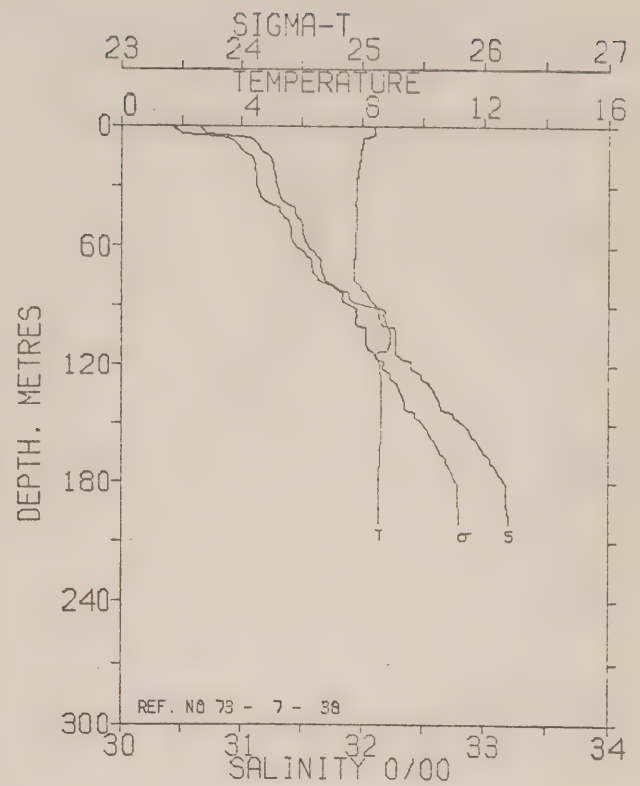
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	9.09	29.34	22.71	110.	8.30	32.42	25.23	0.	8.92	29.30	22.71	115.	8.34	32.45	25.25
5.	9.08	29.34	22.71	115.	8.23	32.46	25.26	5.	8.92	29.31	22.71	120.	8.44	32.68	25.41
10.	8.87	30.12	23.35	120.	8.34	32.49	25.28	10.	8.47	29.93	23.26	125.	8.47	32.75	25.46
15.	8.50	30.55	23.74	125.	8.35	32.72	25.46	15.	8.38	30.65	23.84	130.	8.49	32.79	25.49
20.	8.47	30.59	23.78	130.	8.36	32.65	25.56	20.	8.37	30.69	23.87	135.	8.54	32.64	25.52
25.	8.46	30.66	23.83	135.	8.40	32.89	25.58	25.	8.36	30.73	23.90	140.	8.55	32.89	25.55
30.	8.45	30.75	23.91	140.	8.53	33.07	25.71	30.	8.35	30.84	23.99	145.	8.63	32.90	25.56
35.	8.43	31.07	24.16	145.	8.60	33.08	25.70	35.	8.34	31.12	24.21	150.	8.63	32.92	25.57
40.	8.42	31.20	24.26	150.	8.62	33.08	25.70	40.	8.35	31.27	24.32	155.	8.63	33.00	25.64
45.	8.43	31.29	24.33	155.	8.62	33.08	25.70	45.	8.35	31.41	24.48	160.	8.63	33.01	25.64
50.	8.02	31.45	24.51	160.	8.62	33.09	25.70	50.	7.89	31.54	24.60	165.	8.62	33.03	25.66
55.	7.97	31.60	24.64	165.	8.62	33.09	25.70	55.	7.86	31.66	24.70	170.	8.59	33.10	25.72
60.	7.97	31.78	24.78	170.	8.63	33.18	25.78	60.	7.90	31.79	24.79	175.	8.58	33.14	25.75
65.	7.96	31.80	24.80	175.	8.64	33.23	25.81	65.	7.90	31.87	24.86	180.	8.58	33.14	25.75
70.	7.96	31.93	24.90	180.	8.63	33.29	25.86	70.	7.92	31.90	24.88	185.	8.58	33.17	25.78
75.	7.97	31.94	24.90	185.	8.64	33.25	25.91	75.	7.97	32.02	24.96	190.	8.54	33.26	25.85
80.	7.96	32.22	25.12	190.	8.66	33.35	25.90	80.	8.15	32.12	25.02	195.	8.53	33.20	25.88
85.	8.05	32.23	25.12	195.	8.66	33.38	25.93	85.	8.25	32.20	25.06	200.	8.52	33.21	25.89
90.	8.15	32.30	25.16	200.	8.66	33.40	25.95	90.	8.30	32.22	25.07	205.	8.51	33.32	25.90
95.	8.20	32.29	25.14	205.	8.65	33.42	25.96	95.	8.32	32.26	25.10	210.	8.51	33.22	25.90
100.	8.22	32.31	25.15	210.	8.65	33.43	25.97	100.	8.36	32.30	25.13	215.	8.51	33.33	25.91
105.	8.27	32.40	25.22	215.	8.65	33.44	25.98	105.	8.38	32.36	25.17	220.	8.51	33.34	25.92



REFERENCE NO. 73-7-37 STN- JF3 DATE 7/3/73  
 POSITION 48-21.7N, 124-18.3W PST 22.8  
 RESULTS OF STD CAST 45 POINTS TAKEN FROM ANALOG TRACE

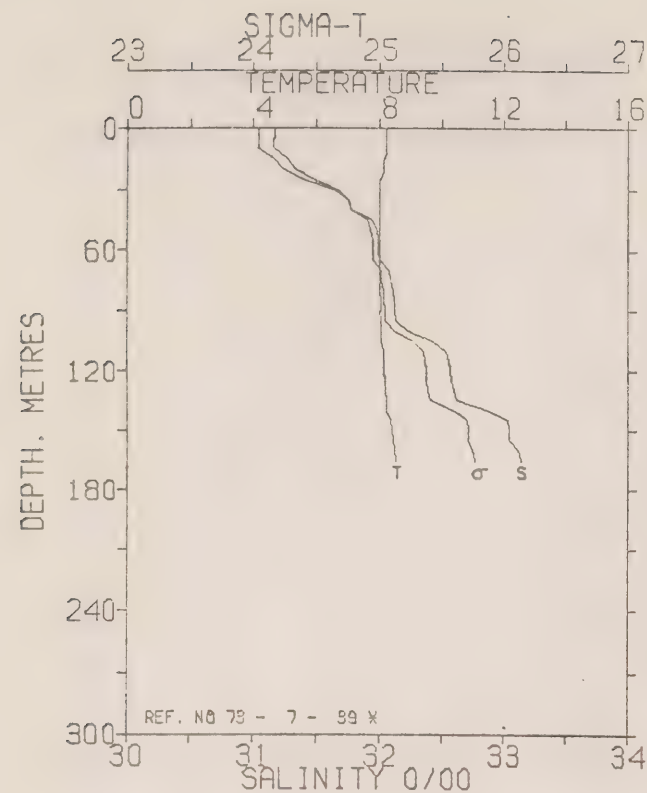
DEPTH	TEMP	SAL	SIGMA T	SVa	DELTA D	POT EN	SOUND VEL
0	8.42	30.68	23.85	405.9	0.0	0.0	1479.
10	8.01	30.89	24.07	385.2	0.40	0.02	1478.
20	7.96	31.04	24.20	373.2	0.77	0.08	1478.
30	7.87	31.13	24.28	365.6	1.14	0.17	1478.
50	7.87	31.41	24.51	344.7	1.85	0.46	1479.
75	7.78	31.76	24.79	318.0	2.68	0.59	1479.
100	8.68	32.21	25.01	297.3	3.44	1.67	1484.
125	8.51	32.43	25.21	279.3	4.17	2.50	1484.
150	8.57	32.72	25.43	258.7	4.84	3.44	1485.
175	8.60	33.15	25.75	228.3	5.45	4.44	1486.
200	8.62	33.30	25.87	217.3	6.00	5.50	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.42	30.68	23.85	110.	8.83	32.35	25.10	0.	8.44	30.44	23.66	105.	8.93	32.28	25.03
5.	8.25	30.76	23.94	115.	8.84	32.35	25.09	5.	8.28	30.81	23.98	110.	8.86	32.28	25.04
10.	8.01	30.89	24.07	120.	8.78	32.24	25.02	10.	7.98	30.97	24.14	115.	8.47	32.30	25.11
15.	7.97	31.04	24.20	125.	8.51	32.43	25.21	15.	7.94	31.08	24.23	120.	8.59	32.40	25.17
20.	7.96	31.04	24.20	130.	8.51	32.45	25.22	20.	7.89	31.11	24.26	125.	8.62	32.49	25.24
25.	7.92	31.06	24.22	135.	8.51	32.55	25.30	25.	7.85	31.12	24.28	130.	8.64	32.56	25.29
30.	7.87	31.13	24.28	140.	8.52	32.60	25.34	30.	7.81	31.13	24.29	135.	8.65	32.61	25.32
35.	7.86	31.23	24.36	145.	8.57	32.66	25.38	35.	7.81	31.16	24.32	140.	8.64	32.64	25.35
40.	7.86	31.31	24.43	150.	8.57	32.72	25.43	40.	7.79	31.27	24.40	145.	8.64	32.75	25.44
45.	7.87	31.41	24.50	155.	8.58	32.80	25.48	45.	7.81	31.34	24.46	150.	8.64	32.83	25.50
50.	7.87	31.41	24.51	160.	8.59	32.58	25.62	50.	7.81	31.40	24.50	155.	8.64	32.89	25.55
55.	7.85	31.49	24.57	165.	8.60	32.99	25.63	55.	7.79	31.42	24.52	160.	8.62	32.55	25.60
60.	7.77	31.56	24.64	170.	8.60	33.05	25.68	60.	7.77	31.46	24.55	165.	8.58	33.00	25.64
65.	7.77	31.58	24.65	175.	8.60	33.15	25.75	65.	7.74	31.55	24.62	170.	8.57	33.05	25.68
70.	7.77	31.62	24.68	180.	8.60	33.18	25.78	70.	7.72	31.58	24.66	175.	8.56	33.12	25.74
75.	7.78	31.76	24.79	185.	8.60	33.21	25.81	75.	7.74	31.62	24.65	180.	8.56	33.17	25.78
80.	7.85	31.85	24.85	190.	8.58	33.28	25.86	80.	7.94	31.76	24.77	185.	8.56	33.18	25.79
85.	8.19	31.93	24.86	195.	8.62	33.30	25.87	85.	8.21	31.89	24.83	190.	8.56	33.16	25.77
90.	8.34	32.18	25.03	200.	8.62	33.30	25.87	90.	8.49	32.03	24.90	195.	8.56	33.19	25.80
95.	8.66	32.20	25.00	205.	8.63	33.31	25.88	95.	8.75	32.14	24.95	200.	8.56	33.20	25.80
100.	8.68	32.21	25.01	210.	8.63	33.30	25.87								
105.	8.80	32.35	25.10	215.	8.65	33.30	25.87								



REFERENCE NO. 73-7-38 STN- JF3 DATE 7/3/73  
 POSITION 48-22.0N, 124-18.0W PST 23.2  
 RESULTS OF STD CAST 125 POINTS TAKEN FROM ANALOG TRACE

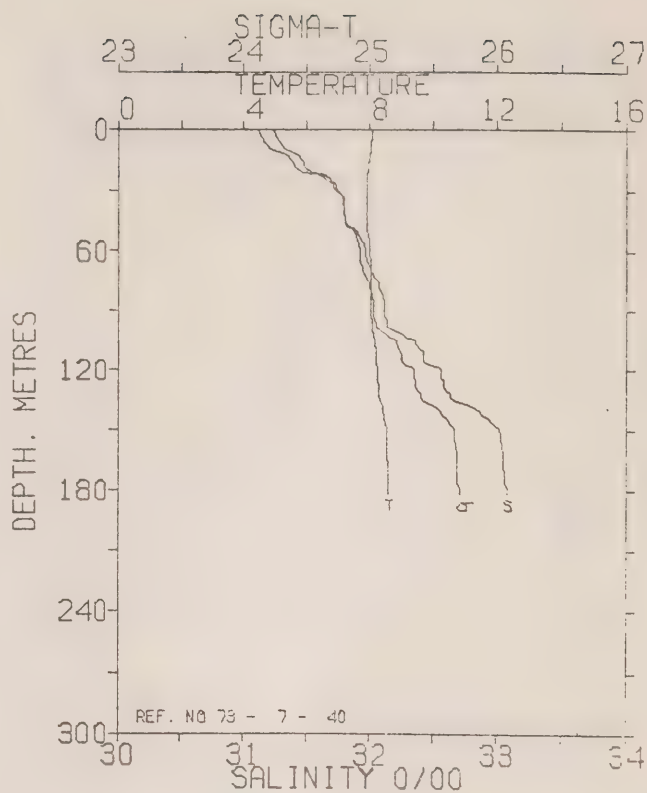
DEPTH	TEMP	SAL	SIGMA T	SVa	DELTA D	POT EN	SOUND VEL
0	8.44	30.44	23.66	423.9	0.0	0.0	1479.
10	7.98	30.97	24.14	378.7	0.40	0.02	1478.
20	7.89	31.11	24.26	367.2	0.77	0.08	1478.
30	7.81	31.13	24.29	364.9	1.14	0.17	1478.
50	7.81	31.40	24.50	344.9	1.85	0.46	1478.
75	7.74	31.62	24.69	327.9	2.65	0.59	1479.
100	8.79	32.18	24.97	301.8	3.47	1.69	1484.
125	8.62	32.49	25.24	276.6	4.20	2.52	1484.
150	8.64	32.83	25.50	251.6	4.86	3.45	1485.
175	8.56	33.12	25.74	229.6	5.46	4.44	1485.
200	8.56	33.20	25.80	224.2	6.03	5.52	1486.



REFERENCE NO. 73-7-39 STN- JF4 \* DATE 8/3/73  
 POSITION 48-17.7N, 124-4.4W PST 0.2  
 RESULTS OF STD CAST 35 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.19	31.04	24.16	376.4	0.0	0.0	1478.
10	8.18	31.03	24.16	377.1	0.38	0.62	1479.
20	8.11	31.23	24.33	361.0	0.74	0.08	1479.
30	8.00	31.64	24.66	329.3	1.09	0.16	1479.
50	7.99	31.98	24.93	304.3	1.72	0.42	1480.
75	8.00	32.09	25.02	296.5	2.48	0.50	1480.
100	8.02	32.22	25.11	287.6	3.21	1.56	1481.
125	8.15	32.57	25.37	263.6	3.88	2.33	1482.
150	8.38	33.04	25.71	232.3	4.51	3.19	1484.

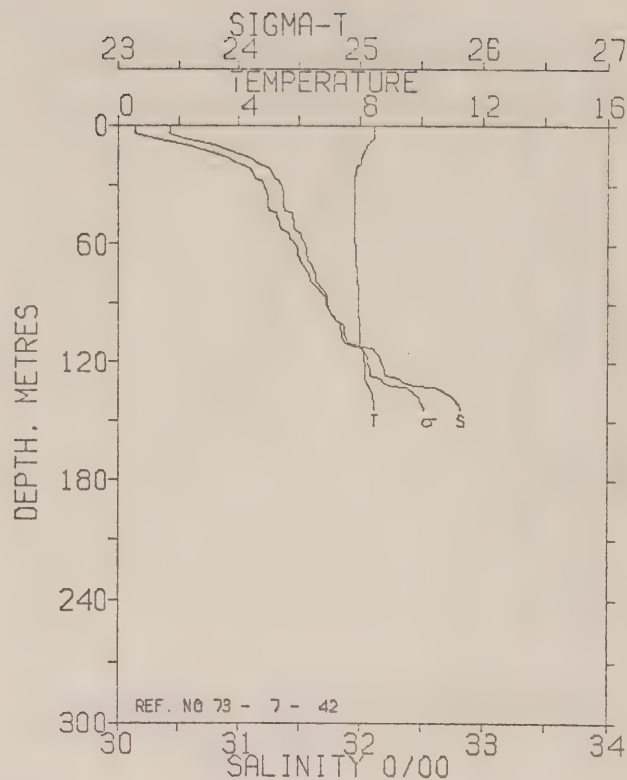
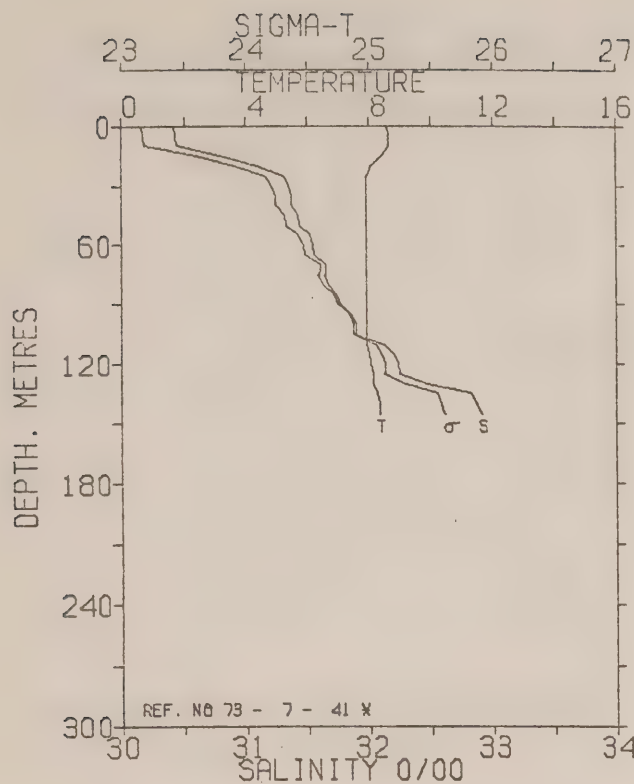
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.19	31.04	24.16	85.	8.02	32.11	25.03
5.	8.19	31.03	24.16	90.	8.01	32.12	25.04
10.	8.18	31.03	24.16	95.	8.02	32.12	25.04
15.	8.14	31.16	24.27	100.	8.02	32.22	25.11
20.	8.11	31.23	24.33	105.	8.07	32.42	25.26
25.	7.98	31.39	24.47	110.	8.12	32.53	25.35
30.	8.00	31.64	24.66	115.	8.13	32.56	25.36
35.	7.98	31.75	24.75	120.	8.13	32.56	25.36
40.	7.99	31.77	24.77	125.	8.15	32.57	25.37
45.	7.98	31.94	24.90	130.	8.17	32.60	25.39
50.	7.99	31.98	24.93	135.	8.18	32.62	25.41
55.	7.98	31.99	24.94	140.	8.21	32.68	25.61
60.	7.98	31.99	24.94	145.	8.34	33.03	25.70
65.	7.98	32.00	24.95	150.	8.38	33.04	25.71
70.	7.99	32.07	25.00	155.	8.42	33.05	25.70
75.	8.00	32.09	25.02	160.	8.45	33.12	25.75
80.	8.01	32.10	25.02	165.	8.50	33.13	25.76



REFERENCE NO. 73-7-40 STN- JF4 DATE 8/3/73  
 POSITION 48-18.2N, 124-4.5W PST 0.5  
 RESULTS OF STD CAST 92 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.08	31.11	24.24	365.1	0.0	0.0	1478.
10	8.03	31.21	24.32	361.4	0.37	0.62	1478.
20	7.94	31.44	24.52	343.3	0.72	0.07	1478.
30	7.91	31.73	24.75	321.5	1.04	0.16	1479.
50	7.93	31.90	24.87	309.6	1.68	0.41	1479.
75	8.03	32.06	24.99	299.2	2.44	0.90	1480.
100	8.09	32.19	25.08	290.6	3.18	1.56	1481.
125	8.27	32.58	25.36	264.8	3.87	2.35	1483.
150	8.53	33.02	25.66	236.3	4.50	3.23	1485.
175	8.57	33.06	25.69	234.2	5.09	4.20	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.08	31.11	24.24	95.	8.07	32.13	25.04
5.	8.06	31.15	24.27	100.	8.09	32.19	25.08
10.	8.03	31.21	24.32	105.	8.15	32.36	25.21
15.	7.98	31.37	24.46	110.	8.18	32.40	25.24
20.	7.94	31.44	24.52	115.	8.15	32.43	25.25
25.	7.91	31.66	24.69	120.	8.26	32.56	25.34
30.	7.91	31.73	24.75	125.	8.27	32.58	25.36
35.	7.92	31.79	24.79	130.	8.25	32.60	25.37
40.	7.92	31.80	24.80	135.	8.32	32.66	25.41
45.	7.92	31.81	24.81	140.	8.41	32.65	25.55
50.	7.93	31.90	24.87	145.	8.48	32.64	25.61
55.	7.97	31.94	24.90	150.	8.53	33.02	25.66
60.	8.00	31.96	24.92	155.	8.55	33.04	25.68
65.	8.01	31.97	24.92	160.	8.55	33.05	25.69
70.	8.02	32.00	24.95	165.	8.57	33.05	25.69
75.	8.03	32.06	24.99	170.	8.57	33.06	25.69
80.	8.05	32.08	25.00	175.	8.57	33.06	25.69
85.	8.06	32.11	25.02	180.	8.58	33.08	25.71



REFERENCE NO. 73-7-41 STN- JFS \* DATE 8/ 3/73  
 POSITION 48-16.5N, 123-49.5W PST 1.5  
 RESULTS OF STD CAST 31 POINTS TAKEN FROM ANALOG TRACE

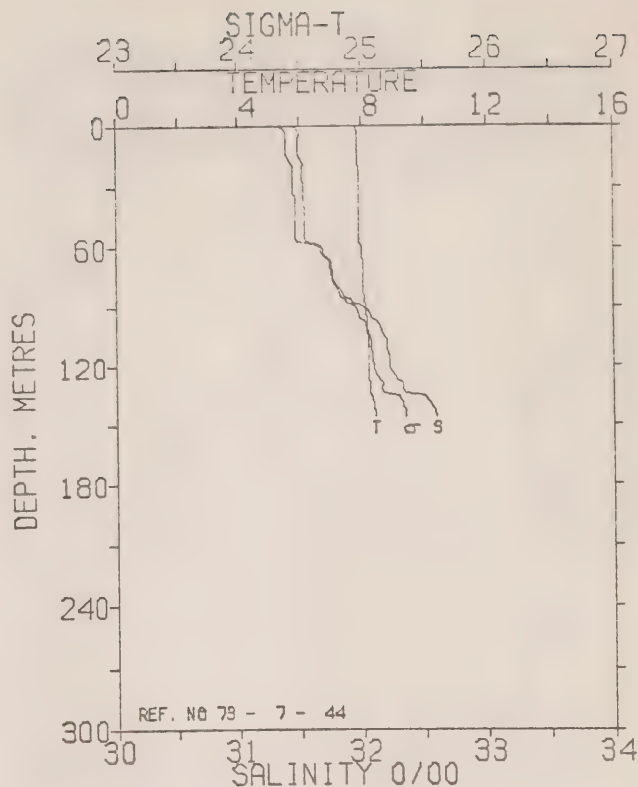
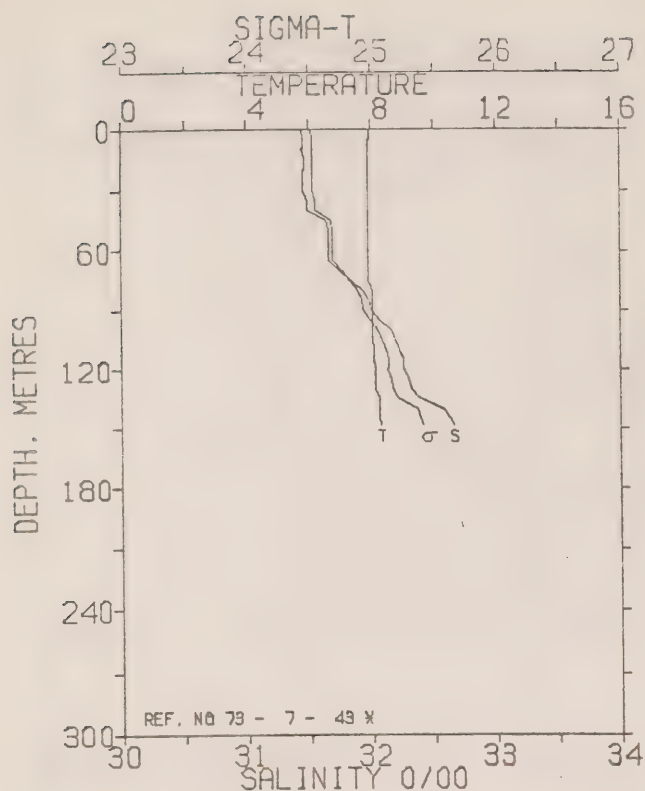
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA E	POT EN	SOUND VEL
0	8.60	30.16	23.42	447.3	0.0	0.0	1479.
10	8.61	30.19	23.44	445.5	0.45	0.02	1479.
20	8.02	30.91	24.09	383.8	0.86	0.09	1478.
30	7.89	31.21	24.35	359.6	1.23	0.18	1478.
50	7.89	31.32	24.43	351.7	1.94	0.47	1479.
75	7.90	31.58	24.63	332.8	2.79	1.01	1479.
100	7.89	31.89	24.87	310.4	3.59	1.73	1480.
125	8.15	32.24	25.11	288.0	4.33	2.57	1482.

REFERENCE NO. 73-7-42 STN- JFS DATE 8/ 3/73  
 POSITION 48-16.5N, 123-50.0W PST 1.8  
 RESULTS OF STD CAST 79 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA E	POT EN	SOUND VEL
0	8.48	30.14	23.42	446.9	0.0	0.0	1478.
10	8.21	30.56	23.79	412.3	0.44	0.02	1478.
20	7.93	31.05	24.21	372.6	0.83	0.08	1478.
30	7.83	31.21	24.35	359.2	1.19	0.17	1478.
50	7.82	31.34	24.45	349.8	1.90	0.46	1478.
75	7.90	31.58	24.63	333.1	2.75	1.00	1479.
100	7.99	31.86	24.84	313.8	3.57	1.73	1480.
125	8.16	32.20	25.08	291.3	4.32	2.59	1482.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.60	30.16	23.42	75.	7.90	31.58	24.63	0.	8.48	30.14	23.42	75.	7.90	31.58	24.63
5.	8.61	30.17	23.43	80.	7.91	31.63	24.67	5.	8.48	30.20	23.47	80.	7.93	31.63	24.66
10.	8.61	30.19	23.44	85.	7.91	31.71	24.73	10.	8.21	30.56	23.79	85.	7.95	31.70	24.72
15.	8.38	30.60	23.80	90.	7.91	31.74	24.76	15.	8.05	30.86	24.05	90.	7.55	31.72	24.74
20.	8.02	30.91	24.09	95.	7.91	31.85	24.84	20.	7.93	31.05	24.21	95.	7.96	31.76	24.76
25.	7.88	31.15	24.30	100.	7.89	31.89	24.87	25.	7.85	31.13	24.29	100.	7.55	31.86	24.84
30.	7.89	31.21	24.35	105.	7.88	31.88	24.87	30.	7.83	31.21	24.35	105.	7.99	31.87	24.85
35.	7.89	31.24	24.36	110.	7.89	32.11	25.05	35.	7.81	31.24	24.38	110.	7.97	31.91	24.88
40.	7.89	31.24	24.37	115.	7.99	32.19	25.09	40.	7.81	31.24	24.38	115.	8.10	32.14	25.04
45.	7.90	31.32	24.43	120.	8.02	32.24	25.13	45.	7.81	31.32	24.44	120.	8.14	32.17	25.06
50.	7.89	31.32	24.43	125.	8.15	32.24	25.11	50.	7.82	31.34	24.45	125.	8.16	32.20	25.08
55.	7.90	31.43	24.51	130.	8.14	32.47	25.29	55.	7.83	31.42	24.51	130.	8.22	32.26	25.19
60.	7.90	31.46	24.54	135.	8.25	32.81	25.54	60.	7.86	31.48	24.55	135.	8.37	32.70	25.44
65.	7.90	31.48	24.55	140.	8.31	32.87	25.58	65.	7.86	31.48	24.56	140.	8.44	32.79	25.50
70.	7.91	31.60	24.65	145.	8.34	32.90	25.60								





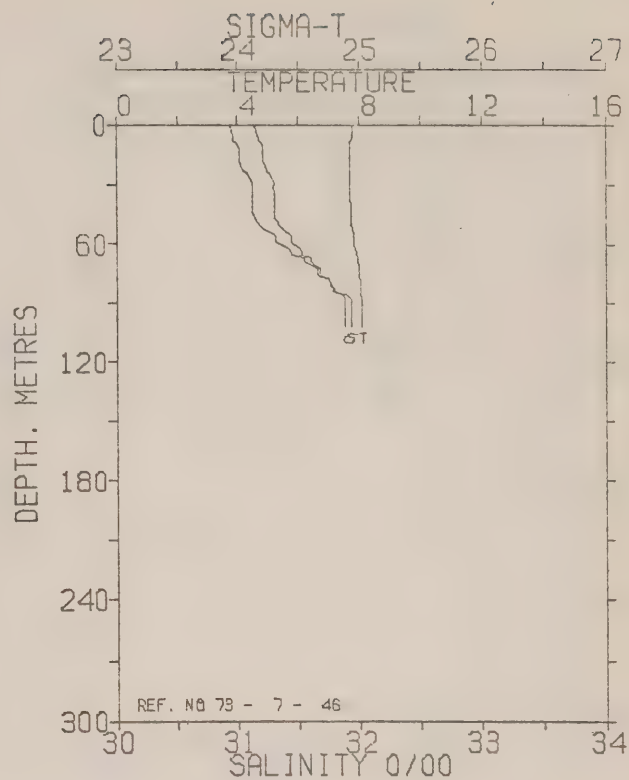
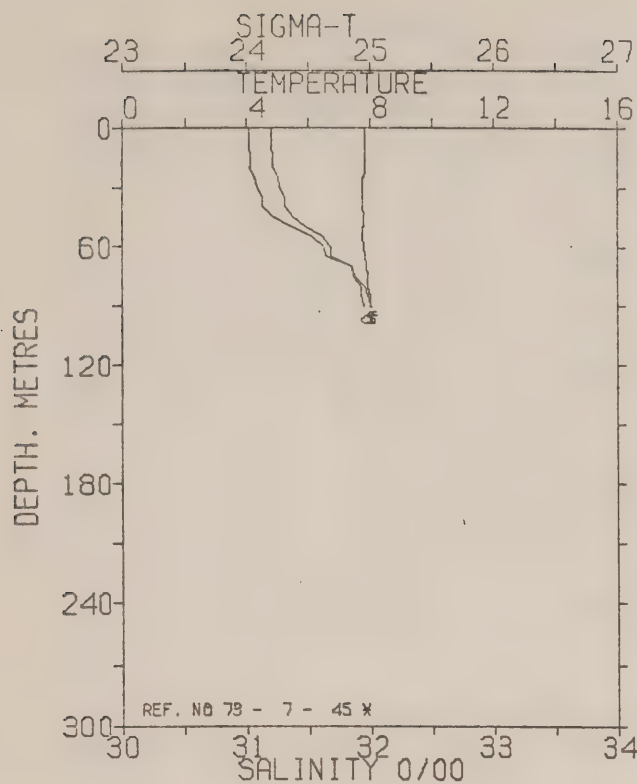
REFERENCE NO. 73-7-43 STN- JF6 \* DATE 8/ 3/73  
 POSITION 48-14.6N, 123-34.4W PST 2.7  
 RESULTS OF STD CAST 31 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.94	31.44	24.51	342.9	0.0	0.0	1478.
10	7.91	31.45	24.52	342.4	0.34	0.02	1478.
20	7.91	31.45	24.53	341.9	0.68	0.07	1478.
30	7.92	31.46	24.53	342.0	1.03	0.16	1478.
50	7.92	31.65	24.68	327.7	1.70	0.43	1479.
75	7.93	31.83	24.83	314.6	2.51	0.95	1480.
100	8.06	32.15	25.06	293.0	3.27	1.62	1481.
125	8.10	32.29	25.16	283.4	3.99	2.45	1482.

REFERENCE NO. 73-7-44 STN- JF6 DATE 8/ 3/73  
 POSITION 48-14.5N, 123-34.6W PST 3.0  
 RESULTS OF STD CAST 67 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA C	POT EN	SOUND VEL
0	7.85	31.34	24.45	348.8	0.0	0.0	1478.
10	7.87	31.39	24.49	345.8	0.35	0.02	1478.
20	7.89	31.44	24.52	342.6	0.69	0.07	1478.
30	7.90	31.45	24.53	342.3	1.03	0.16	1478.
50	7.90	31.47	24.54	341.3	1.72	0.44	1479.
75	8.03	31.77	24.76	321.0	2.54	0.96	1480.
100	8.17	32.15	25.04	295.0	3.31	1.65	1481.
125	8.22	32.27	25.12	287.1	4.04	2.48	1482.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.94	31.44	24.51	75.	7.93	31.83	24.83	0.	7.85	31.34	24.45	75.	8.03	31.77	24.76
5.	7.92	31.45	24.53	80.	8.01	31.53	24.89	5.	7.87	31.39	24.49	80.	8.04	31.82	24.80
10.	7.91	31.45	24.52	85.	8.03	31.58	24.92	10.	7.87	31.39	24.49	85.	8.08	31.86	24.83
15.	7.92	31.46	24.53	90.	8.04	31.59	24.93	15.	7.87	31.40	24.50	90.	8.12	32.01	24.94
20.	7.91	31.45	24.53	95.	8.06	32.06	24.99	20.	7.89	31.44	24.52	95.	8.15	32.07	24.98
25.	7.91	31.46	24.53	100.	8.06	32.15	25.06	25.	7.89	31.44	24.52	100.	8.17	32.15	25.04
30.	7.92	31.46	24.53	105.	8.06	32.19	25.09	30.	7.90	31.45	24.53	105.	8.17	32.18	25.06
35.	7.92	31.49	24.55	110.	8.07	32.22	25.11	35.	7.90	31.46	24.54	110.	8.19	32.20	25.07
40.	7.91	31.49	24.56	115.	8.09	32.25	25.13	40.	7.90	31.46	24.54	115.	8.19	32.21	25.09
45.	7.93	31.64	24.67	120.	8.09	32.25	25.13	45.	7.90	31.47	24.54	120.	8.20	32.22	25.09
50.	7.92	31.63	24.68	125.	8.10	32.29	25.16	50.	7.90	31.47	24.54	125.	8.22	32.27	25.12
55.	7.91	31.65	24.69	130.	8.12	32.32	25.18	55.	7.90	31.46	24.53	130.	8.26	32.33	25.16
60.	7.92	31.65	24.68	135.	8.23	32.38	25.21	60.	7.98	31.66	24.68	135.	8.30	32.52	25.31
65.	7.93	31.65	24.69	140.	8.24	32.58	25.36	65.	8.00	31.71	24.72	140.	8.37	32.56	25.33
70.	7.93	31.75	24.76	145.	8.27	32.62	25.39	70.	8.03	31.76	24.75	145.	8.40	32.59	25.35



REFERENCE NO. 73- 7- 45 STN- JF7 \* DATE 8/ 3/73  
 POSITION 48-16.1N, 123-19.9W PST 3.9  
 RESULTS OF STD CAST 20 POINTS TAKEN FROM ANALOG TRACE

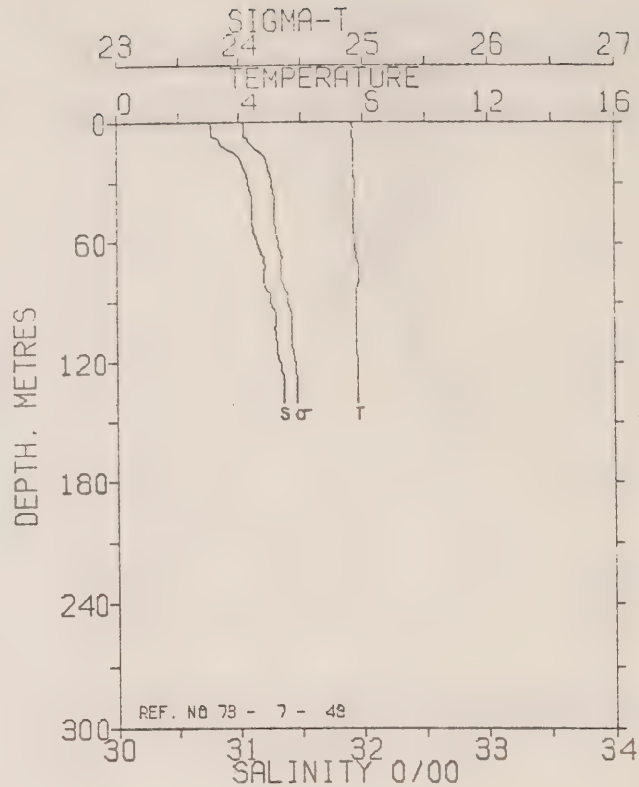
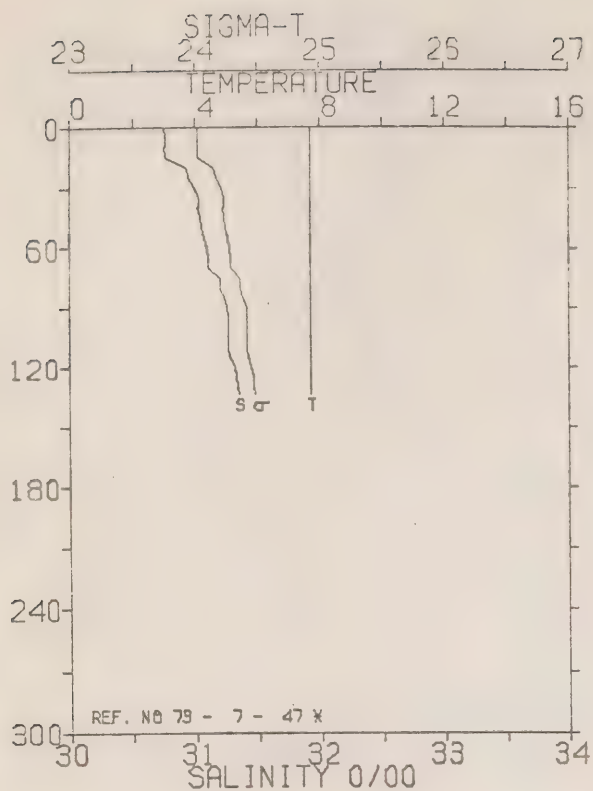
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.83	31.01	24.20	373.3	0.0	0.0	1477.
10	7.84	31.02	24.20	373.4	0.37	0.02	1477.
20	7.81	31.02	24.20	373.0	0.75	0.08	1477.
30	7.74	31.08	24.26	367.6	1.12	0.17	1477.
50	7.74	31.35	24.48	347.3	1.84	0.46	1478.
75	7.90	31.87	24.86	311.5	2.65	0.58	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.83	31.01	24.20	50.	7.74	31.35	24.48
5.	7.83	31.02	24.20	55.	7.74	31.52	24.60
10.	7.84	31.02	24.20	60.	7.77	31.62	24.68
15.	7.84	31.03	24.21	65.	7.83	31.63	24.68
20.	7.81	31.02	24.20	70.	7.86	31.85	24.85
25.	7.74	31.06	24.25	75.	7.90	31.87	24.86
30.	7.74	31.08	24.26	80.	7.93	31.96	24.92
35.	7.74	31.13	24.30	85.	7.99	31.98	24.93
40.	7.74	31.13	24.30	90.	8.00	31.99	24.94

REFERENCE NO. 73- 7- 46 STN- JF7 DATE 8/ 3/73  
 POSITION 48-16.0N, 123-20.0W PST 4.2  
 RESULTS OF STD CAST 47 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.80	30.94	24.15	378.0	0.0	0.0	1477.
10	7.72	31.00	24.20	372.9	0.38	0.02	1477.
20	7.69	31.02	24.22	371.0	0.75	0.08	1477.
30	7.71	31.12	24.30	364.3	1.12	0.17	1477.
50	7.74	31.18	24.34	360.7	1.84	0.47	1478.
75	7.98	31.65	24.68	328.7	2.70	1.01	1480.
100	8.09	31.93	24.88	310.0	3.49	1.71	1481.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.80	30.94	24.15	50.	7.74	31.18	24.34
5.	7.75	30.96	24.17	55.	7.80	31.31	24.43
10.	7.72	31.00	24.20	60.	7.82	31.35	24.46
15.	7.71	31.01	24.21	65.	7.89	31.44	24.53
20.	7.69	31.02	24.22	70.	7.96	31.58	24.62
25.	7.70	31.08	24.27	75.	7.98	31.65	24.68
30.	7.71	31.12	24.30	80.	8.02	31.77	24.76
35.	7.71	31.13	24.30	85.	8.03	31.89	24.86
40.	7.72	31.11	24.29	90.	8.09	31.93	24.88
45.	7.71	31.11	24.29	95.	8.09	31.93	24.88



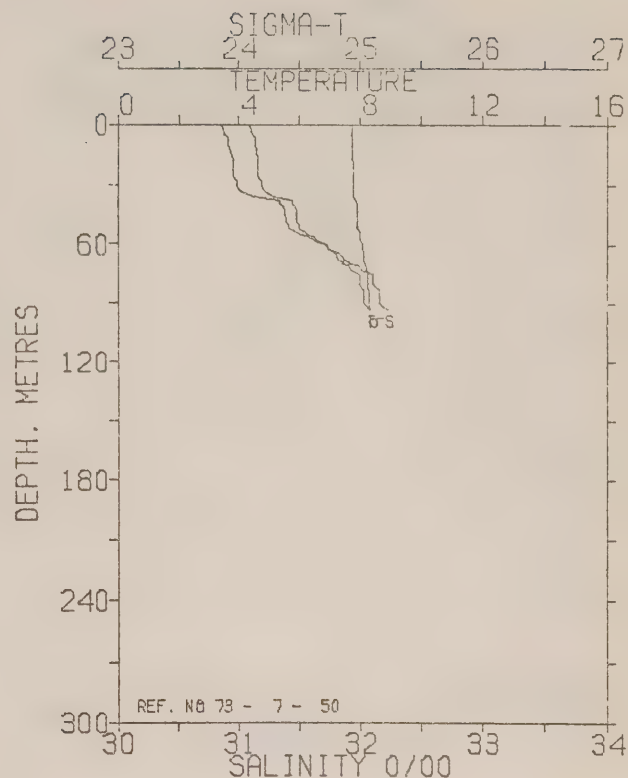
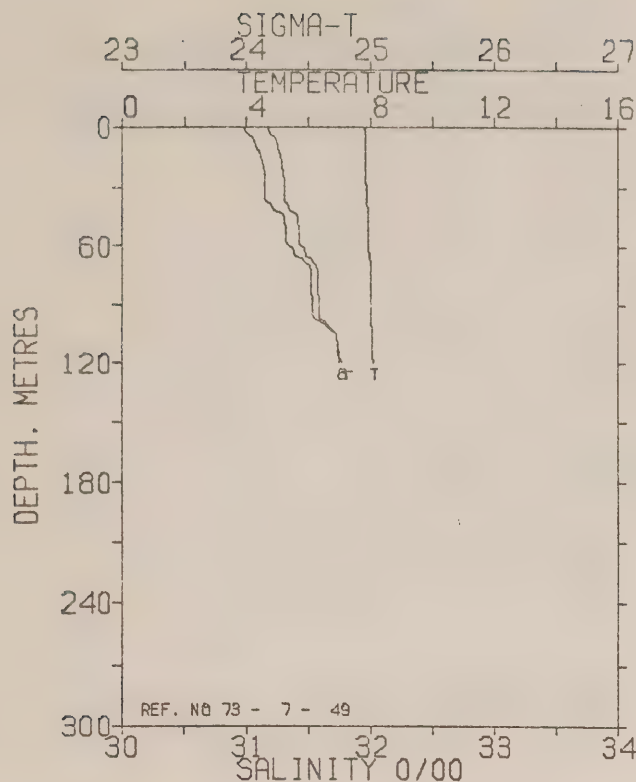
REFERENCE NO. 73-7-47 STN- JF8 \* DATE 8/3/73  
 POSITION 48-14.8N, 123-5.3W PST 5.1  
 RESULTS OF STD CAST 28 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.69	30.75	24.01	391.0	0.0	0.0	1476.
10	7.70	30.75	24.01	391.2	0.39	0.02	1476.
20	7.70	30.93	24.15	378.2	0.78	0.08	1477.
30	7.69	31.00	24.20	373.1	1.15	0.17	1477.
50	7.69	31.05	24.24	369.7	1.90	0.48	1477.
75	7.70	31.19	24.36	355.3	2.81	1.06	1478.
100	7.70	31.27	24.41	354.1	3.70	1.86	1479.
125	7.71	31.32	24.46	350.2	4.59	2.87	1479.

REFERENCE NO. 73-7-48 STN- JF8 DATE 8/3/73  
 POSITION 48-14.6N, 123-5.5W PST 5.5  
 RESULTS OF STD CAST 54 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA C	POT EN	SOUND VEL
0	7.65	30.75	24.02	390.2	0.0	0.0	1476.
10	7.68	30.83	24.08	385.1	0.39	0.02	1476.
20	7.72	31.02	24.22	371.7	0.77	0.08	1477.
30	7.72	31.07	24.26	368.1	1.14	0.17	1477.
50	7.70	31.11	24.29	365.5	1.87	0.47	1478.
75	7.87	31.20	24.34	360.7	2.77	1.05	1479.
100	7.79	31.29	24.42	353.4	3.67	1.84	1479.
125	7.83	31.34	24.46	350.4	4.55	2.85	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.69	30.75	24.01	70.	7.71	31.10	24.28	0.	7.65	30.75	24.02	70.	7.82	31.19	24.34
5.	7.69	30.76	24.02	75.	7.70	31.19	24.36	5.	7.66	30.77	24.03	75.	7.87	31.20	24.34
10.	7.70	30.75	24.01	80.	7.71	31.20	24.36	10.	7.68	30.83	24.08	80.	7.84	31.20	24.34
15.	7.69	30.76	24.02	85.	7.71	31.22	24.38	15.	7.68	30.95	24.17	85.	7.78	31.25	24.39
20.	7.70	30.93	24.15	90.	7.71	31.26	24.40	20.	7.72	31.02	24.22	90.	7.78	31.26	24.39
25.	7.68	30.94	24.16	95.	7.71	31.26	24.41	25.	7.72	31.05	24.24	95.	7.79	31.29	24.42
30.	7.69	31.00	24.20	100.	7.70	31.27	24.41	30.	7.72	31.07	24.26	100.	7.79	31.29	24.42
35.	7.70	31.02	24.22	105.	7.71	31.27	24.41	35.	7.73	31.08	24.26	105.	7.79	31.29	24.42
40.	7.70	31.02	24.22	110.	7.71	31.27	24.41	40.	7.70	31.10	24.28	110.	7.80	31.29	24.42
45.	7.70	31.04	24.23	115.	7.71	31.28	24.42	45.	7.70	31.10	24.28	115.	7.80	31.31	24.43
50.	7.69	31.05	24.24	120.	7.70	31.31	24.45	50.	7.70	31.10	24.28	120.	7.82	31.33	24.44
55.	7.70	31.07	24.26	125.	7.71	31.32	24.46	55.	7.71	31.12	24.29	125.	7.83	31.34	24.46
60.	7.70	31.09	24.28	130.	7.71	31.34	24.47	60.	7.74	31.14	24.31	130.	7.83	31.36	24.47
								65.	7.76	31.17	24.33	135.	7.83	31.36	24.47



REFERENCE NO. 73- 7- 49 STN- JF8 DATE 12/ 3/73  
 POSITION 48-14.6N, 123- 5.5W PST 10.0  
 RESULTS OF STD CAST 51 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA E	POT EN	SOUND VEL
0	7.83	30.98	24.17	375.5	0.0	0.0	1477.
10	7.82	31.08	24.25	368.6	0.37	0.02	1477.
20	7.84	31.13	24.29	364.9	0.74	0.07	1478.
30	7.85	31.15	24.30	364.0	1.10	0.17	1478.
50	7.91	31.32	24.42	352.5	1.82	0.46	1479.
75	7.99	31.51	24.57	339.4	2.69	1.01	1480.
100	8.01	31.62	24.65	332.0	3.53	1.77	1480.

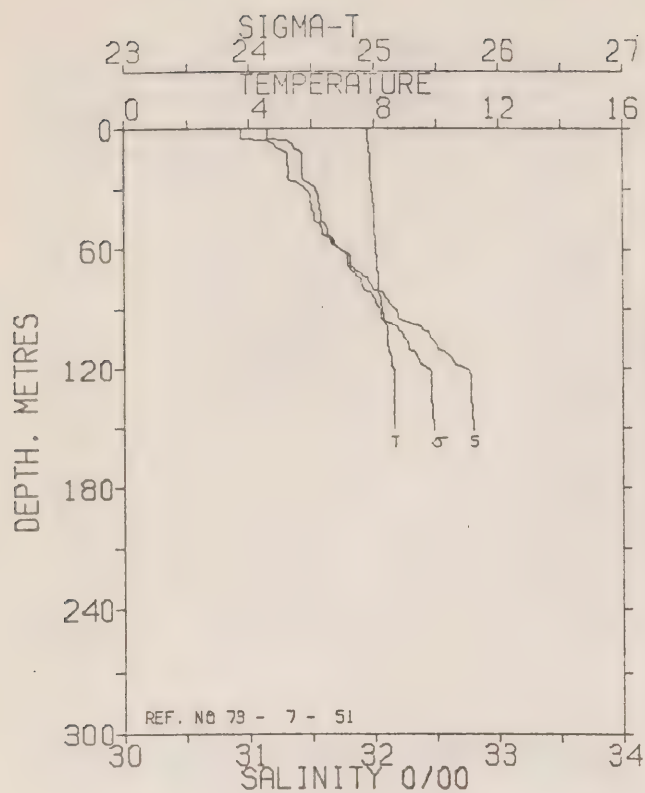
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.83	30.98	24.17	65.	7.93	31.38	24.47
5.	7.81	31.05	24.23	70.	7.99	31.50	24.56
10.	7.82	31.08	24.25	75.	7.99	31.51	24.57
15.	7.84	31.11	24.27	80.	8.00	31.52	24.57
20.	7.84	31.13	24.29	85.	8.00	31.53	24.57
25.	7.85	31.14	24.30	90.	8.00	31.53	24.58
30.	7.85	31.15	24.30	95.	7.99	31.54	24.58
35.	7.86	31.15	24.30	100.	8.01	31.62	24.65
40.	7.88	31.20	24.34	105.	8.05	31.72	24.72
45.	7.91	31.30	24.41	110.	8.05	31.73	24.72
50.	7.91	31.32	24.42	115.	8.06	31.74	24.73
55.	7.92	31.32	24.42	120.	8.07	31.76	24.75

REFERENCE NO. 73- 7- 50 STN- JF7 DATE 12/ 3/73  
 POSITION 48-16.0N, 123-20.0W PST 11.2  
 RESULTS OF STD CAST 51 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.73	30.86	24.09	383.1	0.0	0.0	1476.
10	7.73	30.91	24.13	379.8	0.38	0.02	1477.
20	7.75	30.95	24.16	377.2	0.76	0.08	1477.
30	7.75	30.99	24.19	374.5	1.14	0.17	1477.
50	7.92	31.41	24.49	346.0	1.85	0.46	1479.
75	8.24	32.10	24.99	298.9	2.66	0.98	1481.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.73	30.86	24.09	50.	7.92	31.41	24.49
5.	7.72	30.88	24.11	55.	7.97	31.51	24.56
10.	7.73	30.91	24.13	60.	8.07	31.73	24.72
15.	7.74	30.94	24.15	65.	8.11	31.83	24.80
20.	7.75	30.95	24.16	70.	8.15	31.91	24.86
25.	7.75	30.95	24.16	75.	8.24	32.10	24.99
30.	7.75	30.99	24.19	80.	8.26	32.10	24.99
35.	7.76	31.08	24.26	85.	8.29	32.16	25.03
40.	7.88	31.34	24.44	90.	8.30	32.16	25.03

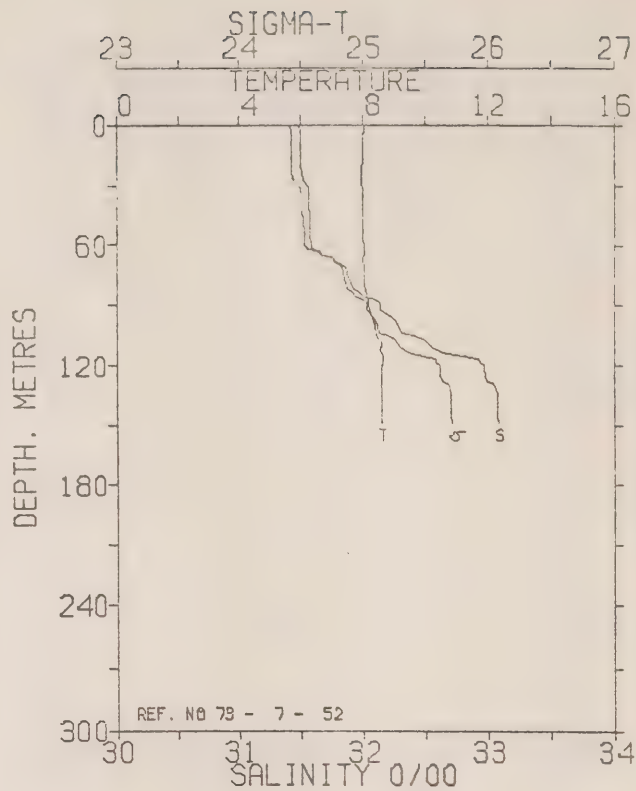




REFERENCE NO. 73- 7- 51 STN- JF6 DATE 12/ 3/73  
 POSITION 48-14.7N, 123-34.6W PST 12.1  
 RESULTS OF STD CAST 84 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.78	30.93	24.14	378.5	0.0	0.0	1477.
10	7.84	31.22	24.36	358.1	0.37	0.02	1478.
20	7.87	31.31	24.42	352.0	0.72	0.07	1478.
30	7.92	31.45	24.53	342.5	1.07	0.16	1478.
50	7.99	31.59	24.62	333.5	1.75	0.44	1479.
75	8.12	31.95	24.89	308.7	2.56	0.95	1481.
100	8.39	32.38	25.19	280.8	3.30	1.61	1483.
125	8.63	32.78	25.46	255.2	3.96	2.37	1484.
150	8.63	32.79	25.47	254.4	4.60	3.27	1485.

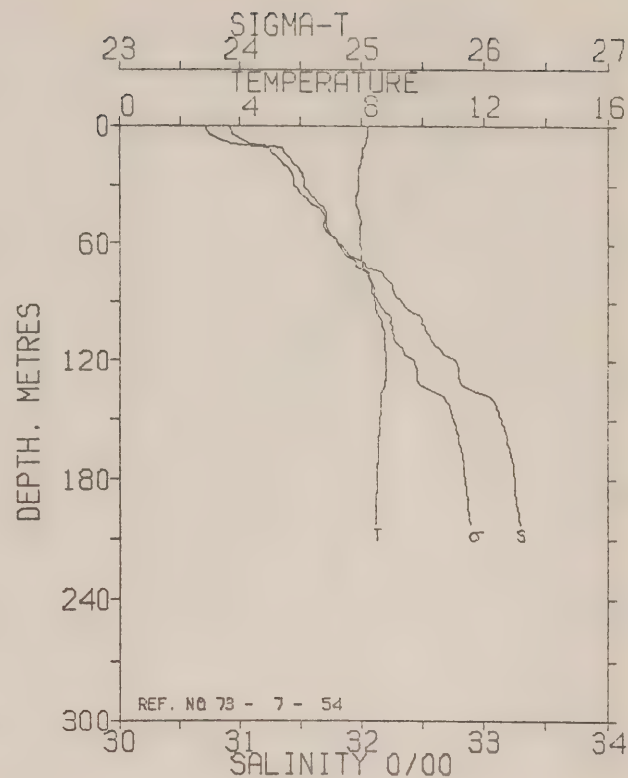
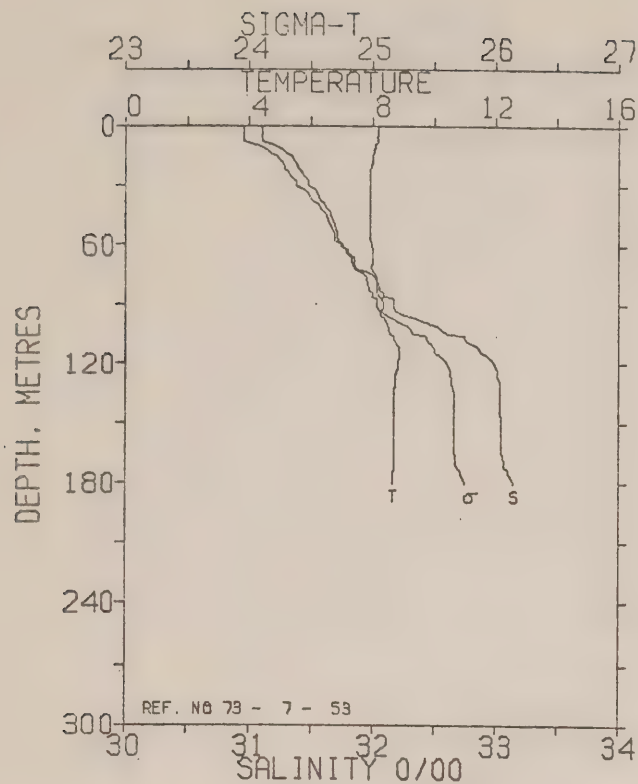
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.78	30.93	24.14	80.	8.14	31.59	24.92
5.	7.77	30.93	24.14	85.	8.20	32.11	25.01
10.	7.84	31.22	24.36	90.	8.26	32.18	25.05
15.	7.86	31.30	24.42	95.	8.30	32.23	25.08
20.	7.87	31.31	24.42	100.	8.39	32.38	25.19
25.	7.87	31.31	24.43	105.	8.41	32.46	25.25
30.	7.92	31.45	24.53	110.	8.47	32.51	25.28
35.	7.95	31.49	24.55	115.	8.55	32.63	25.35
40.	7.96	31.48	24.54	120.	8.59	32.73	25.43
45.	7.97	31.52	24.57	125.	8.63	32.78	25.46
50.	7.99	31.59	24.62	130.	8.63	32.78	25.46
55.	8.02	31.65	24.67	135.	8.63	32.76	25.44
60.	8.04	31.73	24.72	140.	8.63	32.79	25.47
65.	8.08	31.80	24.78	145.	8.63	32.78	25.47
70.	8.08	31.83	24.80	150.	8.63	32.79	25.47



REFERENCE NO. 73- 7- 52 STN- JF5 DATE 12/ 3/73  
 POSITION 48-16.5N, 123-50.0W PST 13.2  
 RESULTS OF STD CAST 64 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.02	31.41	24.48	345.9	0.0	0.0	1478.
10	8.00	31.42	24.49	345.4	0.35	0.02	1478.
20	7.95	31.42	24.50	344.9	0.69	0.07	1478.
30	7.95	31.48	24.54	340.7	1.03	0.16	1479.
50	7.99	31.52	24.57	338.7	1.71	0.43	1479.
75	8.04	31.88	24.84	313.0	2.54	0.96	1480.
100	8.36	32.28	25.11	287.8	3.29	1.63	1482.
125	8.59	32.98	25.62	239.8	3.94	2.37	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.02	31.41	24.48	75.	8.04	31.88	24.84
5.	8.01	31.42	24.49	80.	8.06	31.91	24.86
10.	8.00	31.42	24.49	85.	8.11	32.00	24.93
15.	8.01	31.42	24.49	90.	8.18	32.13	25.03
20.	7.95	31.42	24.50	95.	8.27	32.21	25.07
25.	7.94	31.43	24.51	100.	8.36	32.28	25.11
30.	7.95	31.48	24.54	105.	8.41	32.40	25.20
35.	7.97	31.50	24.56	110.	8.55	32.54	25.28
40.	7.97	31.51	24.56	115.	8.62	32.61	25.49
45.	7.97	31.52	24.57	120.	8.60	32.67	25.61
50.	7.99	31.52	24.57	125.	8.59	32.58	25.62
55.	8.01	31.53	24.57	130.	8.59	33.05	25.68
60.	8.02	31.54	24.58	135.	8.59	33.08	25.70
65.	8.01	31.66	24.68	140.	8.59	33.08	25.70
70.	8.01	31.82	24.81	145.	8.59	33.05	25.68



REFERENCE NO. 73- 7- 53 STN- JF4 DATE 12/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 14.2  
 RESULTS OF STD CAST 95 POINTS TAKEN FROM ANALOG TRACE

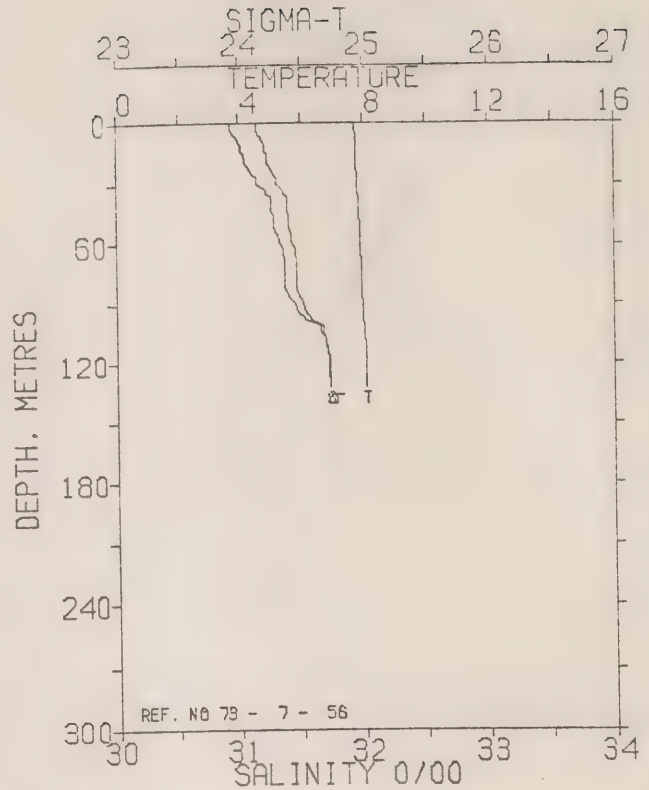
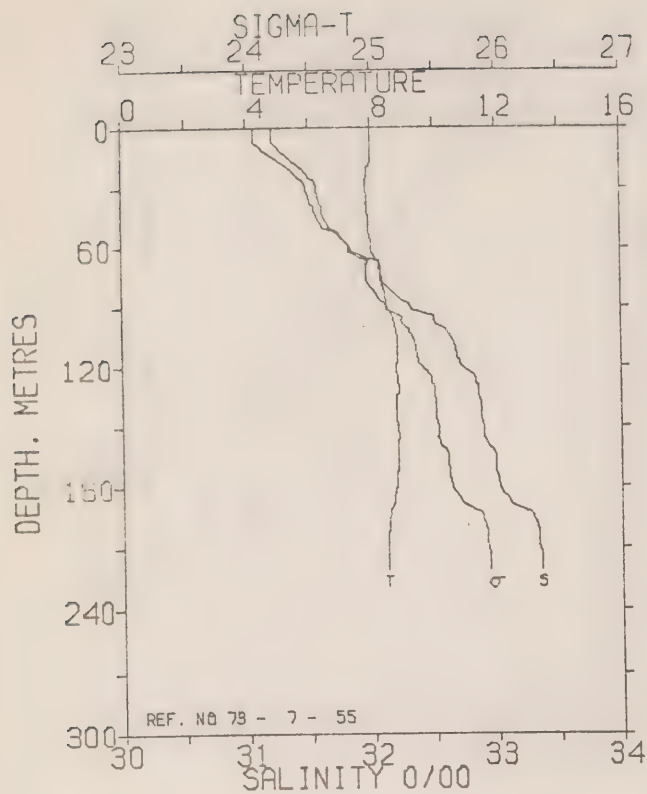
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.15	30.95	24.11	381.9	0.0	0.0	1478.
10	8.07	31.06	24.20	373.5	0.38	0.02	1478.
20	7.95	31.28	24.39	355.3	0.74	0.07	1478.
30	7.90	31.38	24.47	347.4	1.09	0.16	1478.
50	7.89	31.66	24.69	326.9	1.77	0.44	1479.
75	8.07	32.00	24.93	304.4	2.56	0.94	1481.
100	8.47	32.47	25.24	275.2	3.30	1.60	1483.
125	8.73	33.01	25.63	239.5	3.93	2.32	1485.
150	8.69	33.04	25.66	237.1	4.53	3.16	1485.
175	8.64	33.10	25.71	232.0	5.12	4.14	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.15	30.95	24.11	95.	8.26	32.27	25.12
5.	8.16	30.95	24.10	100.	8.47	32.47	25.24
10.	8.07	31.06	24.20	105.	8.56	32.60	25.33
15.	8.00	31.22	24.34	110.	8.78	32.82	25.47
20.	7.95	31.28	24.39	115.	8.85	32.89	25.52
25.	7.92	31.33	24.43	120.	8.78	32.58	25.59
30.	7.90	31.38	24.47	125.	8.73	33.01	25.63
35.	7.91	31.48	24.55	130.	8.71	33.03	25.64
40.	7.93	31.56	24.61	135.	8.70	33.04	25.65
45.	7.88	31.62	24.66	140.	8.70	33.04	25.65
50.	7.89	31.66	24.69	145.	8.69	33.04	25.65
55.	7.90	31.69	24.71	150.	8.69	33.04	25.66
60.	7.95	31.75	24.75	155.	8.72	33.02	25.64
65.	7.99	31.82	24.81	160.	8.68	32.97	25.60
70.	7.95	31.85	24.84	165.	8.68	33.06	25.67
75.	8.07	32.00	24.93	170.	8.68	33.06	25.67
80.	8.13	32.05	24.96	175.	8.64	33.10	25.71
85.	8.16	32.08	24.99	180.	8.61	33.14	25.74

REFERENCE NO. 73- 7- 54 STN- JF3 DATE 12/ 3/73  
 POSITION 48-22.0N, 124-18.0W PST 15.7  
 RESULTS OF STD CAST 117 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.20	30.71	23.91	400.6	0.0	0.0	1478.
10	8.11	31.03	24.17	375.9	0.39	0.02	1478.
20	7.95	31.38	24.47	347.9	0.75	0.07	1478.
30	7.91	31.45	24.53	342.4	1.09	0.16	1478.
50	7.96	31.70	24.71	324.8	1.76	0.43	1479.
75	8.19	32.18	25.06	292.2	2.54	0.93	1481.
100	8.66	32.49	25.23	276.5	3.25	1.56	1484.
125	8.80	32.80	25.45	256.2	3.92	2.33	1485.
150	8.59	33.14	25.75	227.9	4.52	3.17	1485.
175	8.51	33.24	25.84	220.0	5.08	4.10	1485.
200	8.48	33.29	25.88	216.3	5.63	5.14	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.20	30.71	23.91	105.	8.74	32.53	25.25
5.	8.18	30.77	23.96	110.	8.78	32.58	25.28
10.	8.11	31.03	24.17	115.	8.78	32.65	25.24
15.	8.05	31.29	24.38	120.	8.80	32.78	25.42
20.	7.95	31.38	24.47	125.	8.80	32.80	25.45
25.	7.92	31.43	24.51	130.	8.78	32.81	25.46
30.	7.91	31.45	24.53	135.	8.65	32.91	25.56
35.	7.85	31.52	24.59	140.	8.64	33.08	25.70
40.	7.85	31.61	24.66	145.	8.61	33.12	25.73
45.	7.93	31.69	24.71	150.	8.59	33.14	25.75
50.	7.96	31.70	24.71	155.	8.58	33.18	25.78
55.	7.95	31.74	24.75	160.	8.56	33.19	25.79
60.	7.95	31.82	24.81	165.	8.53	33.21	25.82
65.	7.97	31.89	24.86	170.	8.52	33.23	25.83
70.	8.04	32.02	24.96	175.	8.51	33.24	25.84
75.	8.19	32.18	25.06	180.	8.49	33.25	25.85
80.	8.36	32.24	25.08	185.	8.49	33.25	25.85
85.	8.42	32.26	25.09	190.	8.48	33.27	25.87
90.	8.46	32.33	25.14	195.	8.48	33.28	25.88
95.	8.50	32.42	25.20	200.	8.48	33.29	25.88



REFERENCE NO. 73-7-55 STN- JF2 DATE 12/ 3/73  
 POSITION 48-26.0N, 124-31.5W PST 17.5  
 RESULTS OF STD CAST 107 POINTS TAKEN FROM ANALOG TRACE

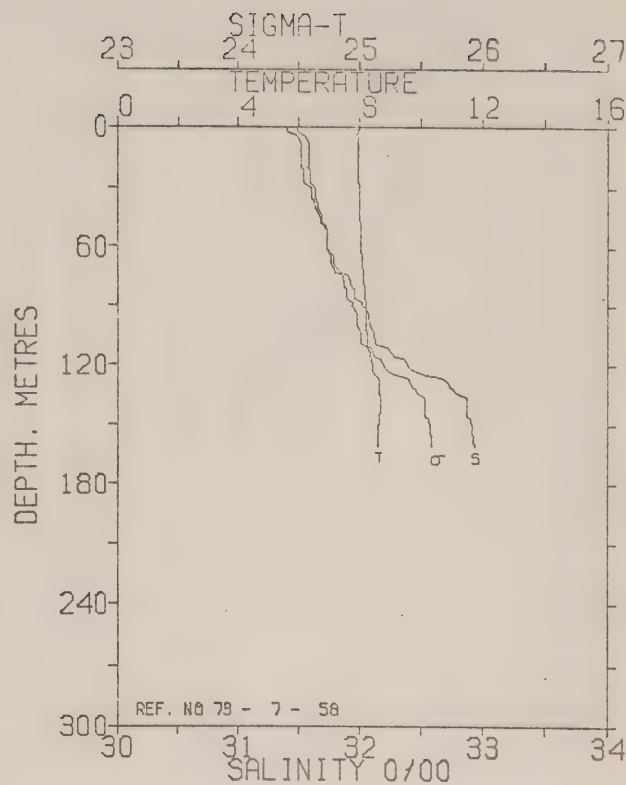
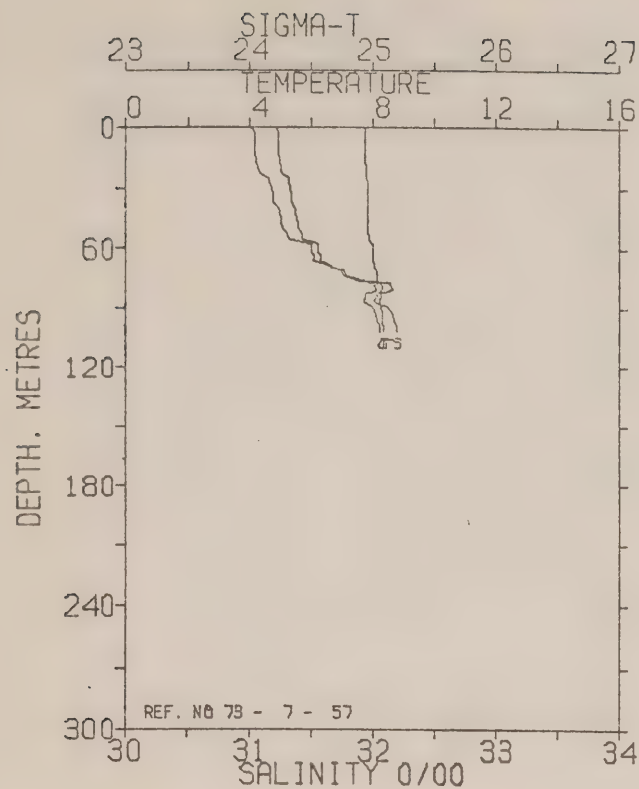
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.99	31.06	24.21	371.6	0.0	0.0	1478.
10	7.98	31.11	24.25	368.2	0.37	0.02	1478.
20	7.88	31.33	24.44	350.7	0.73	0.07	1478.
30	7.85	31.48	24.56	339.5	1.07	0.16	1478.
50	7.89	31.61	24.65	330.6	1.75	0.43	1479.
75	8.32	32.07	24.96	302.2	2.53	0.93	1482.
100	8.73	32.57	25.28	271.9	3.25	1.57	1484.
125	8.79	32.82	25.47	254.3	3.91	2.33	1485.
150	8.79	32.89	25.52	249.6	4.54	3.21	1486.
175	8.74	33.00	25.62	240.8	5.15	4.22	1486.
200	8.49	33.32	25.91	214.2	5.72	5.32	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.99	31.06	24.21	115.	8.80	32.68	25.36
5.	7.98	31.06	24.21	120.	8.77	32.73	25.40
10.	7.98	31.11	24.25	125.	8.75	32.82	25.47
15.	7.99	31.22	24.34	130.	8.83	32.86	25.49
20.	7.88	31.33	24.44	135.	8.78	32.86	25.50
25.	7.86	31.41	24.50	140.	8.78	32.88	25.51
30.	7.85	31.48	24.56	145.	8.78	32.87	25.51
35.	7.86	31.50	24.57	150.	8.78	32.89	25.53
40.	7.86	31.54	24.60	155.	8.82	32.89	25.52
45.	7.88	31.56	24.62	160.	8.80	32.93	25.56
50.	7.89	31.61	24.65	165.	8.80	32.99	25.60
55.	7.95	31.76	24.76	170.	8.77	32.99	25.61
60.	7.98	31.83	24.81	175.	8.74	33.00	25.62
65.	8.10	31.98	24.91	180.	8.72	33.02	25.64
70.	8.29	32.07	24.96	185.	8.67	33.08	25.69
75.	8.32	32.07	24.96	190.	8.59	33.16	25.77
80.	8.38	32.14	25.00	195.	8.52	33.29	25.88
85.	8.44	32.22	25.06	200.	8.49	33.32	25.91
90.	8.51	32.31	25.12	205.	8.49	33.33	25.91
95.	8.68	32.50	25.24	210.	8.47	33.34	25.92
100.	8.73	32.57	25.28	215.	8.46	33.35	25.93
105.	8.81	32.64	25.33	220.	8.45	33.35	25.94

REFERENCE NO. 73-7-56 STN- JF8 DATE 13/ 3/73  
 POSITION 48-14.7N, 123-5.4W PST 8.0  
 RESULTS OF STD CAST 54 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.73	30.93	24.15	377.8	0.0	0.0	1477.
10	7.77	31.00	24.20	373.6	0.38	0.02	1477.
20	7.79	31.05	24.23	370.4	0.75	0.08	1477.
30	7.83	31.15	24.30	363.7	1.11	0.17	1478.
50	7.89	31.29	24.40	354.5	1.83	0.46	1478.
75	7.94	31.37	24.46	349.4	2.71	1.02	1479.
100	8.03	31.64	24.66	330.7	3.57	1.79	1480.
125	8.08	31.73	24.72	325.3	4.38	2.72	1481.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.73	30.93	24.15	70.	7.93	31.36	24.46
5.	7.74	30.95	24.16	75.	7.94	31.30	24.41
10.	7.77	31.00	24.20	80.	7.95	31.36	24.45
15.	7.78	31.04	24.23	85.	7.94	31.40	24.49
20.	7.79	31.05	24.23	90.	7.98	31.45	24.52
25.	7.80	31.11	24.27	95.	8.00	31.50	24.56
30.	7.83	31.15	24.30	100.	8.03	31.64	24.68
35.	7.85	31.22	24.35	105.	8.06	31.67	24.68
40.	7.87	31.27	24.39	110.	8.07	31.70	24.70
45.	7.87	31.27	24.40	115.	8.08	31.72	24.71
50.	7.89	31.29	24.40	120.	8.08	31.73	24.72
55.	7.90	31.32	24.42	125.	8.08	31.72	24.72
60.	7.92	31.34	24.44	130.	8.08	31.74	24.73



REFERENCE NO. 73- 7- 57 STN- JF7 DATE 13/ 3/73  
 POSITION 48-16.0N, 123-20.0W PST 9.0  
 RESULTS OF STD CAST 53 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.73	31.02	24.22	371.1	0.0	0.0	1477.
10	7.73	31.04	24.23	370.1	0.37	0.02	1477.
20	7.75	31.06	24.25	368.9	0.74	0.08	1477.
30	7.81	31.18	24.33	361.2	1.10	0.17	1478.
50	7.83	31.27	24.40	355.1	1.82	0.46	1478.
75	8.12	31.87	24.83	314.3	2.67	1.00	1481.
100	8.31	32.19	25.05	293.7	3.42	1.66	1482.

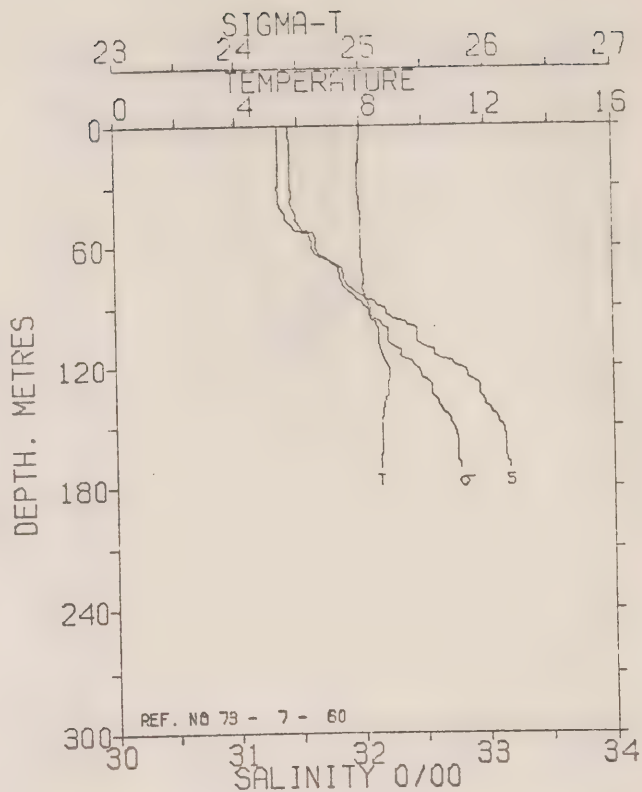
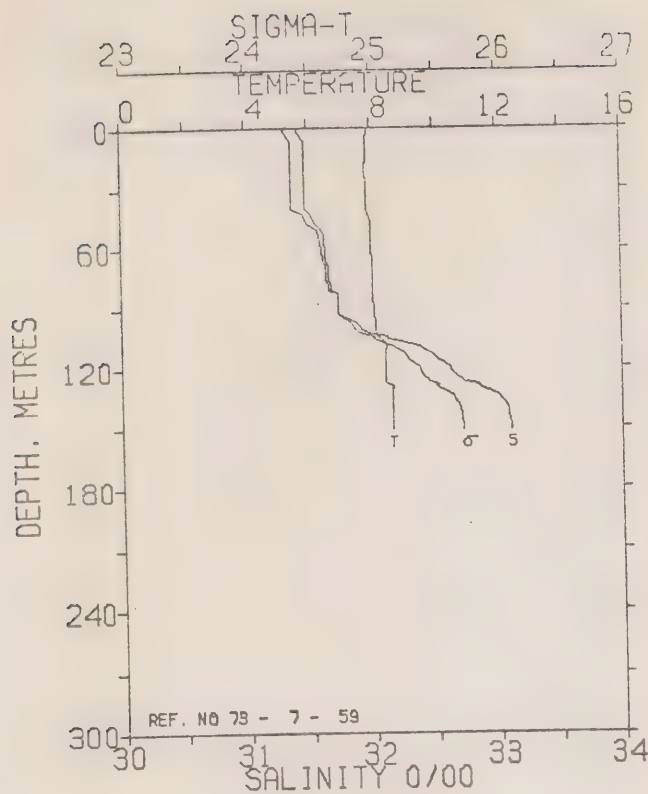
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.73	31.02	24.22	55.	7.87	31.32	24.43
5.	7.73	31.04	24.23	60.	7.96	31.50	24.56
10.	7.73	31.00	24.20	65.	7.98	31.51	24.56
15.	7.73	31.05	24.24	70.	8.02	31.65	24.67
20.	7.75	31.06	24.25	75.	8.12	31.87	24.83
25.	7.80	31.16	24.32	80.	8.30	32.15	25.02
30.	7.81	31.18	24.33	85.	8.23	32.01	24.92
35.	7.81	31.19	24.34	90.	8.27	32.13	25.01
40.	7.81	31.22	24.37	95.	8.30	32.16	25.03
45.	7.82	31.24	24.38	100.	8.31	32.19	25.05

REFERENCE NO. 73- 7- 58 STN- JF6 DATE 13/ 3/73  
 POSITION 48-14.5N, 123-34.5W PST 10.0  
 RESULTS OF STD CAST 80 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.99	31.40	24.48	346.2	0.0	0.0	1478.
10	7.95	31.52	24.58	337.2	0.34	0.02	1478.
20	7.96	31.52	24.58	337.6	0.68	0.07	1479.
30	7.99	31.60	24.63	332.3	1.01	0.15	1479.
50	8.04	31.72	24.72	324.5	1.67	0.42	1480.
75	8.13	31.91	24.86	311.5	2.48	0.93	1481.
100	8.21	32.09	24.98	300.1	3.24	1.61	1482.
125	8.50	32.54	25.29	271.2	3.96	2.44	1484.
150	8.60	32.91	25.57	245.0	4.59	3.33	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.99	31.40	24.48	85.	8.16	31.96	24.89
5.	7.94	31.49	24.56	90.	8.19	32.02	24.94
10.	7.95	31.52	24.58	95.	8.20	32.07	24.97
15.	7.95	31.52	24.58	100.	8.21	32.09	24.98
20.	7.96	31.52	24.58	105.	8.23	32.12	25.01
25.	7.96	31.54	24.59	110.	8.23	32.16	25.04
30.	7.99	31.60	24.63	115.	8.32	32.28	25.12
35.	8.00	31.61	24.64	120.	8.41	32.40	25.19
40.	8.00	31.64	24.66	125.	8.50	32.54	25.29
45.	8.01	31.67	24.69	130.	8.65	32.73	25.42
50.	8.04	31.72	24.72	135.	8.64	32.83	25.50
55.	8.04	31.73	24.73	140.	8.66	32.87	25.53
60.	8.05	31.74	24.73	145.	8.64	32.87	25.53
65.	8.08	31.79	24.77	150.	8.60	32.91	25.57
70.	8.08	31.79	24.77	155.	8.59	32.92	25.58
75.	8.13	31.91	24.86	160.	8.59	32.93	25.58





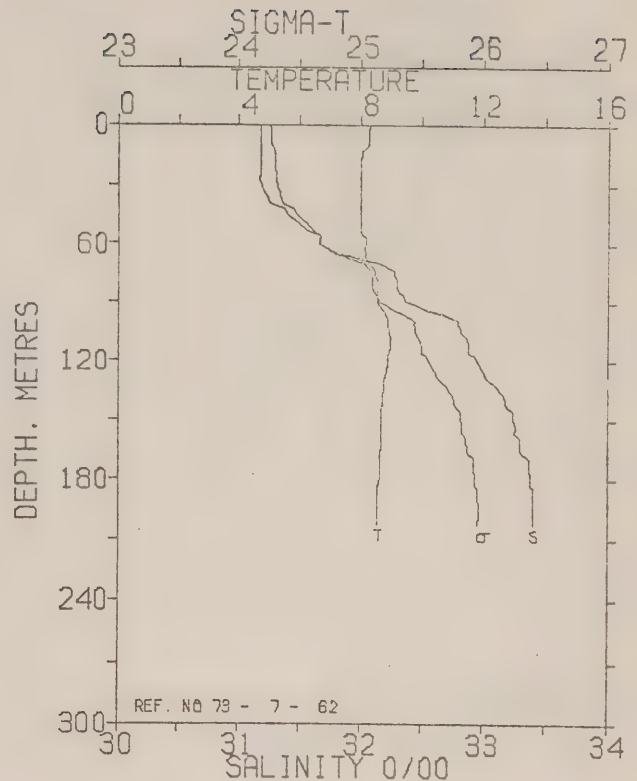
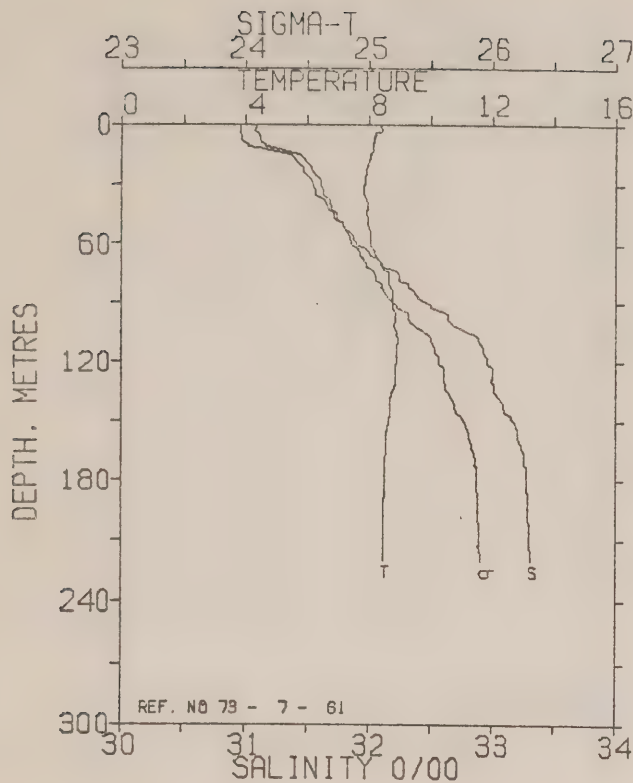
REFERENCE NO. 73-7-59 STN- JF5 DATE 13/ 3/73  
 POSITION 48-16.5N, 123-50.0W PST 11.1  
 RESULTS OF STD CAST 60 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	7.93	31.32	24.43	351.4	0.0	0.0	1478.
10	7.86	31.37	24.47	347.3	0.35	0.02	1478.
20	7.85	31.37	24.47	347.3	0.70	0.07	1478.
30	7.86	31.37	24.47	347.6	1.04	0.16	1478.
50	7.99	31.57	24.61	335.0	1.73	0.44	1479.
75	8.02	31.63	24.66	330.8	2.56	0.97	1480.
100	8.13	31.92	24.86	311.6	3.37	1.69	1481.
125	8.41	32.70	25.43	258.0	4.07	2.49	1484.
150	8.62	33.10	25.72	231.2	4.67	3.32	1485.

REFERENCE NO. 73-7-60 STN- JF4 DATE 13/ 3/73  
 POSITION 48-18.2N, 124-4.5W PST 12.3  
 RESULTS OF STD CAST 84 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	7.99	31.33	24.43	351.5	0.0	0.0	1478.
10	7.94	31.33	24.43	351.3	0.35	0.02	1478.
20	7.93	31.33	24.43	351.3	0.70	0.07	1478.
30	7.93	31.33	24.43	351.5	1.05	0.16	1478.
50	7.98	31.46	24.52	343.1	1.75	0.45	1479.
75	8.07	31.86	24.83	314.4	2.57	0.97	1480.
100	8.53	32.44	25.21	278.3	3.32	1.63	1483.
125	8.87	32.85	25.48	253.7	3.99	2.40	1485.
150	8.61	33.12	25.73	229.6	4.59	3.24	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.93	31.32	24.43	80.	8.05	31.66	24.68	0.	7.99	31.33	24.43	90.	8.30	32.19	25.05
5.	7.87	31.35	24.45	85.	8.07	31.73	24.73	5.	7.99	31.33	24.42	95.	8.30	32.25	25.10
10.	7.86	31.37	24.47	90.	8.07	31.67	24.68	10.	7.94	31.33	24.43	100.	8.53	32.44	25.21
15.	7.85	31.37	24.47	95.	8.11	31.64	24.81	15.	7.93	31.33	24.43	105.	8.56	32.45	25.22
20.	7.86	31.37	24.47	100.	8.13	31.52	24.86	20.	7.93	31.30	24.41	110.	8.59	32.53	25.27
25.	7.56	30.92	24.16	105.	8.30	32.13	25.00	25.	7.90	31.34	24.44	115.	8.69	32.62	25.33
30.	7.66	31.46	24.57	110.	8.44	32.40	25.19	30.	7.94	31.34	24.44	120.	8.85	32.79	25.43
35.	7.85	31.37	24.47	115.	8.42	32.51	25.29	35.	7.94	31.33	24.43	125.	8.87	32.85	25.48
40.	7.94	31.35	24.44	120.	8.41	32.63	25.38	40.	7.93	31.33	24.47	130.	8.83	32.55	25.56
45.	7.94	31.37	24.46	125.	8.41	32.70	25.43	45.	7.97	31.39	24.47	135.	8.79	32.57	25.58
50.	7.99	31.57	24.61	130.	8.64	32.87	25.53	50.	7.98	31.46	24.52	140.	8.71	33.03	25.64
55.	8.00	31.59	24.62	135.	8.64	33.02	25.65	55.	7.99	31.59	24.63	145.	8.65	33.08	25.70
60.	8.01	31.61	24.63	140.	8.62	33.08	25.70	60.	8.00	31.61	24.64	150.	8.61	33.12	25.73
65.	8.01	31.61	24.64	145.	8.62	33.10	25.71	65.	8.01	31.71	24.72	155.	8.60	33.15	25.76
70.	8.02	31.63	24.66	150.	8.62	33.10	25.72	70.	8.06	31.82	24.80	160.	8.60	33.15	25.76
								75.	8.07	31.86	24.83	165.	8.59	33.16	25.76
								80.	8.07	31.92	24.88	170.	8.57	33.18	25.79



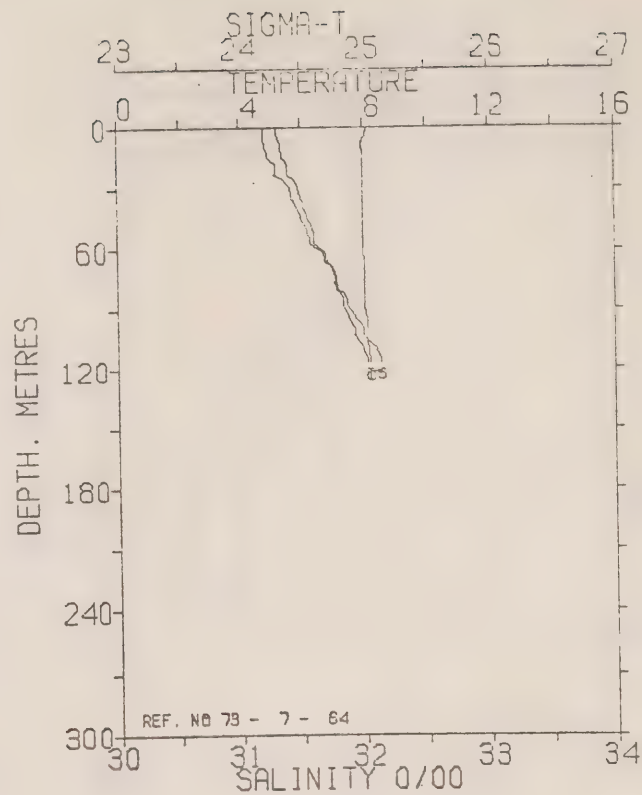
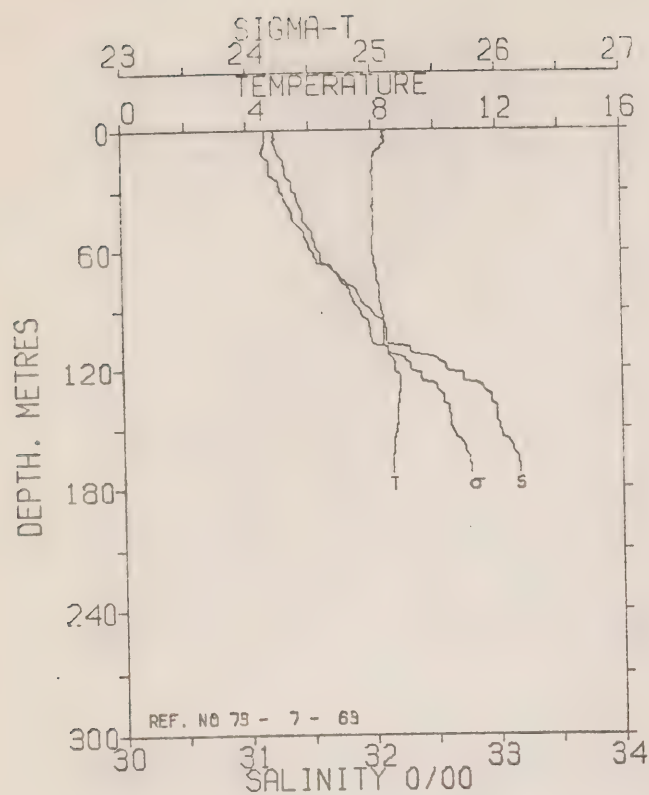
REFERENCE NO. 73-7-61 STN- JF3 DATE 13/ 3/73  
 POSITION 48-22.0N, 124-18.0W PST 13.5  
 RESULTS OF STD CAST 124 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.34	30.95	24.08	384.6	0.0	0.0	1479.
10	8.14	31.02	24.16	377.1	0.38	0.02	1478.
20	7.96	31.44	24.51	344.0	0.74	0.07	1478.
30	7.85	31.54	24.61	334.8	1.08	0.16	1478.
40	7.96	31.78	24.78	318.4	1.73	0.43	1479.
50	8.61	32.23	25.04	294.6	2.50	0.92	1483.
75	8.82	32.65	25.33	266.9	3.21	1.54	1485.
100	8.83	33.00	25.60	241.8	3.83	2.26	1485.
125	8.60	33.16	25.77	226.5	4.43	3.09	1485.
150	8.50	33.27	25.87	217.4	4.98	4.00	1485.
175	8.48	33.29	25.88	216.3	5.52	5.04	1486.
200							

REFERENCE NO. 73-7-62 STN- JF2 DATE 13/ 3/73  
 POSITION 48-26.0N, 124-31.5W PST 14.6  
 RESULTS OF STD CAST 92 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA C	PCT EN	SOUND VEL
0	8.30	31.17	24.26	367.6	0.0	0.0	1479.
10	8.25	31.17	24.26	367.4	0.37	0.02	1479.
20	8.00	31.17	24.30	364.2	0.73	0.07	1478.
30	7.97	31.18	24.31	362.9	1.10	0.17	1478.
40	7.98	31.50	24.56	339.7	1.80	0.45	1479.
50	8.48	32.28	25.09	285.3	2.60	0.96	1482.
75	8.89	32.80	25.44	256.9	3.30	1.58	1485.
100	8.83	33.00	25.60	241.8	3.93	2.30	1486.
125	8.70	33.25	25.82	221.6	4.50	3.10	1486.
150	8.61	33.37	25.93	211.7	5.04	4.00	1486.
175	8.57	33.41	25.96	208.8	5.57	5.00	1486.
200							

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.34	30.95	24.08	105.	8.87	32.80	25.44	0.	8.30	31.17	24.26	105.	8.93	32.82	25.45
5.	8.18	30.96	24.10	110.	8.92	32.89	25.50	5.	8.27	31.17	24.26	110.	8.95	32.87	25.49
10.	8.14	31.02	24.16	115.	8.91	32.92	25.53	10.	8.25	31.17	24.26	115.	8.93	32.89	25.50
15.	8.02	31.35	24.43	120.	8.86	32.96	25.57	15.	8.02	31.17	24.29	120.	8.88	32.95	25.56
20.	7.96	31.44	24.51	125.	8.83	33.00	25.60	20.	8.00	31.17	24.30	125.	8.83	33.00	25.60
25.	7.90	31.49	24.56	130.	8.82	33.00	25.60	25.	7.99	31.17	24.30	130.	8.77	33.05	25.66
30.	7.85	31.54	24.61	135.	8.73	33.02	25.63	30.	7.97	31.18	24.31	135.	8.72	33.13	25.72
35.	7.85	31.56	24.62	140.	8.69	33.07	25.68	35.	8.01	31.23	24.34	140.	8.71	33.18	25.76
40.	7.94	31.65	24.68	145.	8.68	33.09	25.70	40.	8.01	31.27	24.37	145.	8.70	33.24	25.81
45.	7.93	31.71	24.73	150.	8.60	33.16	25.77	45.	8.00	31.40	24.47	150.	8.70	33.25	25.82
50.	7.96	31.78	24.78	155.	8.57	33.20	25.80	50.	7.98	31.50	24.56	155.	8.68	33.26	25.83
55.	8.03	31.85	24.82	160.	8.56	33.21	25.81	55.	8.05	31.65	24.67	160.	8.66	33.29	25.86
60.	8.06	31.89	24.85	165.	8.53	33.24	25.84	60.	8.17	31.67	24.66	165.	8.63	33.30	25.87
65.	8.18	32.00	24.92	170.	8.51	33.26	25.86	65.	8.15	31.81	24.78	170.	8.61	33.37	25.93
70.	8.36	32.10	24.97	175.	8.50	33.27	25.87	70.	8.27	32.15	25.03	175.	8.61	33.37	25.93
75.	8.61	32.23	25.04	180.	8.50	33.27	25.87	75.	8.48	32.28	25.09	180.	8.60	33.38	25.94
80.	8.61	32.31	25.10	185.	8.49	33.28	25.88	80.	8.54	32.29	25.10	185.	8.56	33.40	25.96
85.	8.74	32.37	25.13	190.	8.48	33.24	25.84	85.	8.55	32.32	25.11	190.	8.57	33.40	25.96
90.	8.75	32.47	25.20	195.	8.48	33.30	25.89	90.	8.56	32.41	25.18	195.	8.57	33.41	25.96
95.	8.82	32.63	25.32	200.	8.51	33.23	25.83	95.	8.79	32.65	25.34	200.	8.57	33.41	25.96
100.	8.82	32.65	25.33	205.	8.47	33.32	25.91								



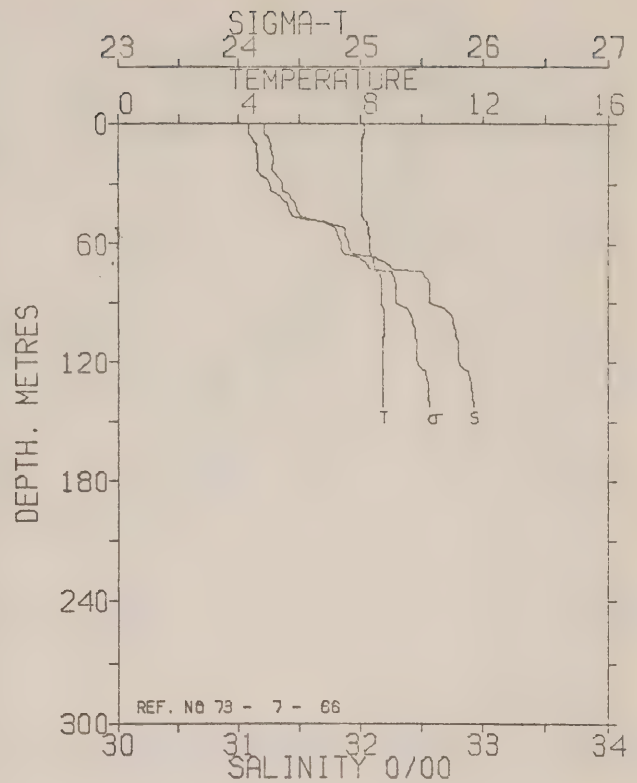
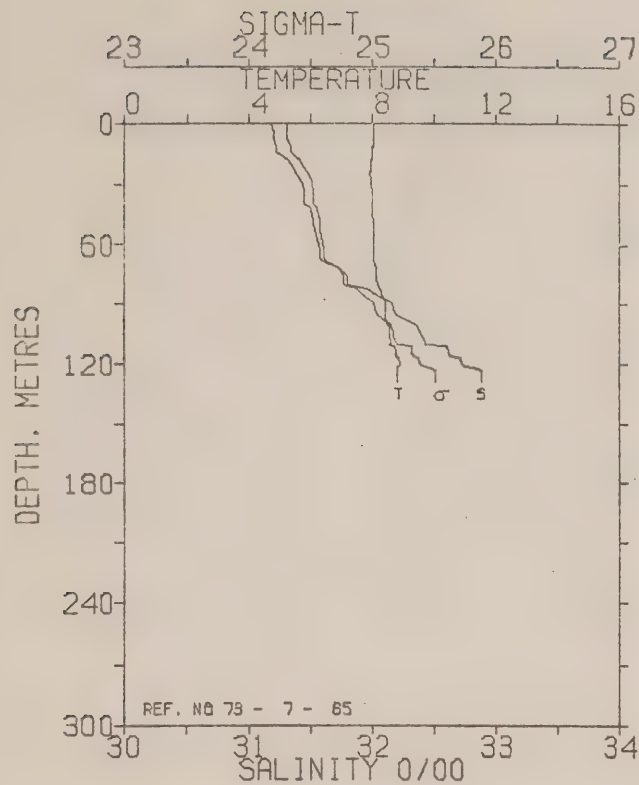
REFERENCE NO. 73-7-63 STN-JF4 DATE 13/ 3/73  
 POSITION 48-17.8N, 124-4.3W PST 16.7  
 RESULTS OF STD CAST 101 POINTS TAKEN FROM ANALOG TRACE

REFERENCE NO. 73-7-64 STN-JF10 DATE 13/ 3/73  
 POSITION 48-22.2N, 124-1.6W PST 17.5  
 RESULTS OF STD CAST 62 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL	DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.45	31.13	24.20	372.7	0.0	0.0	1480.	0	8.10	31.19	24.30	363.4	0.0	0.0	1478.
10	8.15	31.12	24.24	369.7	0.37	0.02	1479.	10	7.96	31.21	24.34	360.3	0.36	0.02	1478.
20	8.01	31.18	24.30	363.8	0.74	0.07	1478.	20	8.00	31.29	24.39	355.3	0.72	0.07	1478.
30	8.02	31.26	24.36	358.0	1.10	0.17	1479.	30	7.99	31.40	24.48	346.7	1.07	0.16	1479.
50	8.02	31.46	24.52	343.6	1.80	0.45	1479.	50	7.99	31.55	24.59	336.5	1.76	0.44	1479.
75	8.14	31.77	24.75	322.0	2.64	0.99	1481.	75	8.04	31.78	24.77	319.9	2.58	0.96	1480.
100	8.32	32.10	24.98	300.8	3.42	1.68	1482.	100	8.11	32.00	24.93	305.0	3.36	1.66	1481.
125	8.83	32.73	25.39	261.9	4.12	2.48	1485.								
150	8.71	33.00	25.63	240.1	4.74	3.34	1485.								

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.45	31.13	24.20	90.	8.28	31.58	24.89	0.	8.10	31.19	24.30	60.	7.98	31.66	24.68
5.	8.41	31.14	24.22	95.	8.34	32.08	24.96	5.	7.98	31.19	24.32	65.	8.01	31.69	24.70
10.	8.15	31.12	24.24	100.	8.32	32.10	24.98	10.	7.96	31.21	24.34	70.	8.03	31.76	24.75
15.	8.03	31.17	24.29	105.	8.31	32.11	24.99	15.	7.97	31.23	24.35	75.	8.04	31.78	24.77
20.	8.01	31.18	24.30	110.	8.46	32.30	25.11	20.	8.00	31.29	24.39	80.	8.05	31.80	24.78
25.	8.02	31.25	24.36	115.	8.65	32.52	25.26	25.	8.00	31.34	24.43	85.	8.06	31.87	24.84
30.	8.02	31.26	24.36	120.	8.66	32.58	25.30	30.	7.99	31.40	24.48	90.	8.08	31.90	24.85
35.	8.02	31.31	24.40	125.	8.83	32.73	25.39	35.	8.00	31.43	24.50	95.	8.10	31.94	24.89
40.	8.02	31.35	24.43	130.	8.84	32.89	25.51	40.	8.01	31.46	24.52	100.	8.11	32.00	24.93
45.	8.02	31.37	24.45	135.	8.80	32.95	25.57	45.	7.97	31.50	24.56	105.	8.13	32.03	24.95
50.	8.02	31.46	24.52	140.	8.76	32.99	25.60	50.	7.99	31.55	24.59	110.	8.15	32.10	25.00
55.	8.00	31.48	24.53	145.	8.75	32.99	25.61	55.	8.00	31.57	24.61	115.	8.18	32.14	25.03
60.	8.01	31.52	24.56	150.	8.71	33.00	25.63								
65.	8.04	31.55	24.59	155.	8.63	33.07	25.69								
70.	8.11	31.69	24.69	160.	8.62	33.12	25.73								
75.	8.14	31.77	24.75	165.	8.58	33.16	25.77								
80.	8.21	31.87	24.82	170.	8.57	33.17	25.78								



REFERENCE NO. 73- 7- 65 STN- JF4 DATE 13/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 18.2  
 RESULTS OF STD CAST 45 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.05	31.18	24.30	363.5	0.0	0.0	1478.
10	8.02	31.21	24.33	361.3	0.36	0.02	1478.
20	7.94	31.33	24.43	351.5	0.72	0.07	1478.
30	7.95	31.43	24.51	344.2	1.07	0.16	1479.
50	8.02	31.52	24.57	338.7	1.75	0.44	1479.
75	8.12	31.78	24.75	321.4	2.59	0.97	1480.
100	8.48	32.35	25.15	284.2	3.35	1.65	1483.
125	8.81	32.88	25.51	250.4	4.02	2.42	1485.

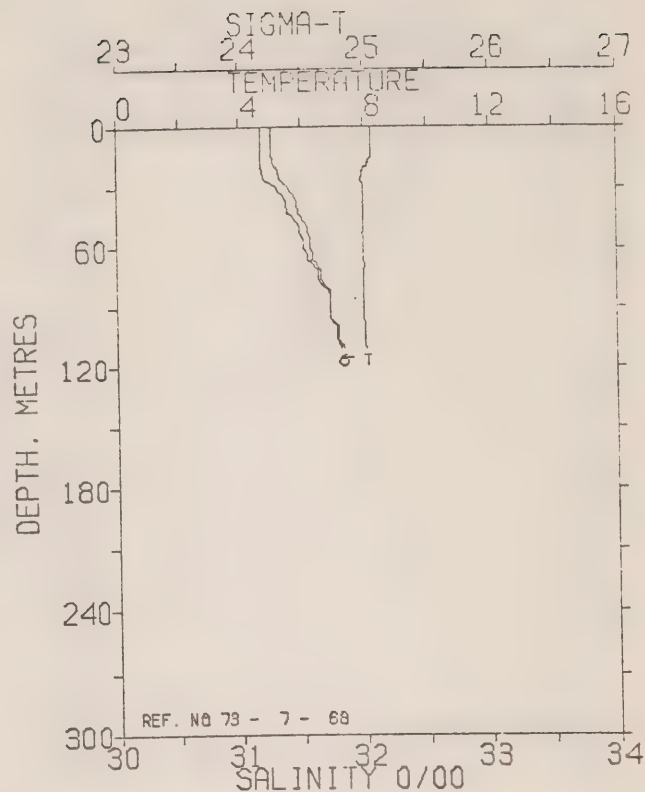
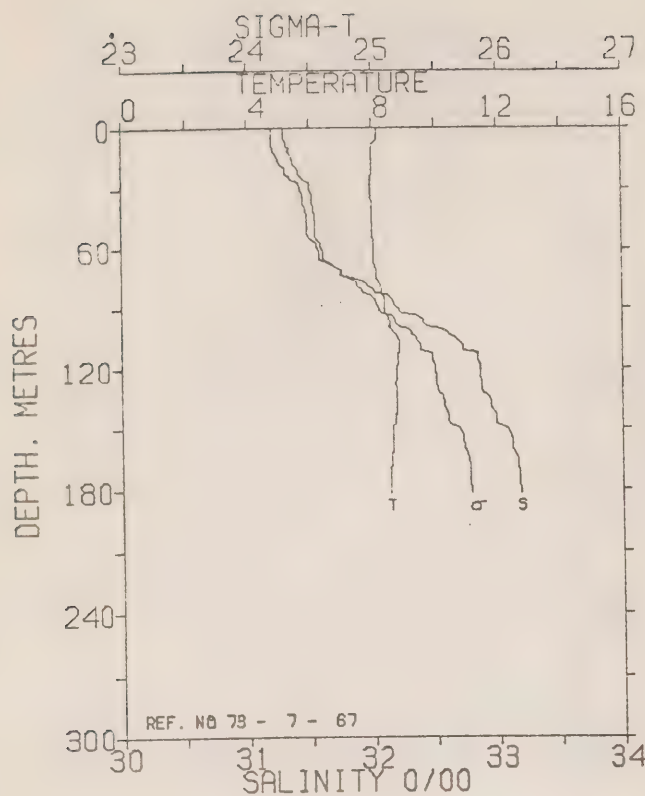
REFERENCE NO. 73- 7- 66 STN- JF9 DATE 13/ 3/73  
 POSITION 48-15.0N, 124- 6.2W PST 18.7  
 RESULTS OF STD CAST 77 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.11	31.07	24.20	372.5	0.0	0.0	1478.
10	8.03	31.14	24.27	366.6	0.37	0.02	1478.
20	8.03	31.15	24.28	366.2	0.74	0.07	1478.
30	8.04	31.25	24.35	359.0	1.10	0.17	1479.
50	8.20	31.75	24.72	324.1	1.80	0.45	1480.
75	8.62	32.51	25.25	273.9	2.56	0.94	1483.
100	8.74	32.75	25.42	258.2	3.23	1.53	1484.
125	8.73	32.89	25.53	248.5	3.87	2.26	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.05	31.18	24.30	65.	8.04	31.57	24.60
5.	8.05	31.19	24.31	70.	8.07	31.66	24.67
10.	8.02	31.21	24.33	75.	8.12	31.78	24.75
15.	7.99	31.25	24.36	80.	8.16	31.80	24.77
20.	7.94	31.33	24.43	85.	8.31	32.02	24.91
25.	7.93	31.38	24.47	90.	8.41	32.16	25.02
30.	7.95	31.43	24.51	95.	8.40	32.19	25.04
35.	7.97	31.44	24.51	100.	8.48	32.35	25.15
40.	7.98	31.45	24.52	105.	8.57	32.39	25.17
45.	8.00	31.51	24.56	110.	8.56	32.43	25.20
50.	8.02	31.52	24.57	115.	8.76	32.62	25.32
55.	8.04	31.54	24.58	120.	8.88	32.73	25.38
60.	8.04	31.56	24.60	125.	8.81	32.88	25.51

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.11	31.07	24.20	75.	8.62	32.51	25.25
5.	8.09	31.08	24.21	80.	8.67	32.56	25.29
10.	8.03	31.14	24.27	85.	8.67	32.56	25.29
15.	8.03	31.15	24.27	90.	8.67	32.56	25.29
20.	8.03	31.15	24.28	95.	8.74	32.73	25.40
25.	8.04	31.18	24.30	100.	8.74	32.75	25.42
30.	8.04	31.25	24.35	105.	8.73	32.78	25.45
35.	8.05	31.32	24.40	110.	8.73	32.80	25.46
40.	8.06	31.40	24.47	115.	8.73	32.80	25.46
45.	8.06	31.43	24.49	120.	8.73	32.80	25.47
50.	8.20	31.75	24.72	125.	8.73	32.89	25.53
55.	8.27	31.88	24.81	130.	8.73	32.91	25.55
60.	8.28	31.91	24.83	135.	8.73	32.91	25.55
65.	8.31	31.95	24.86	140.	8.73	32.92	25.56





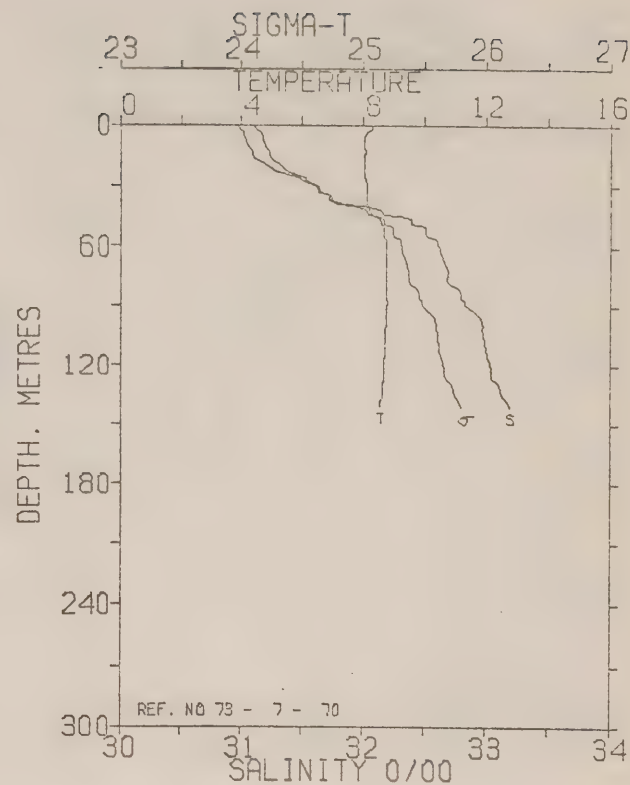
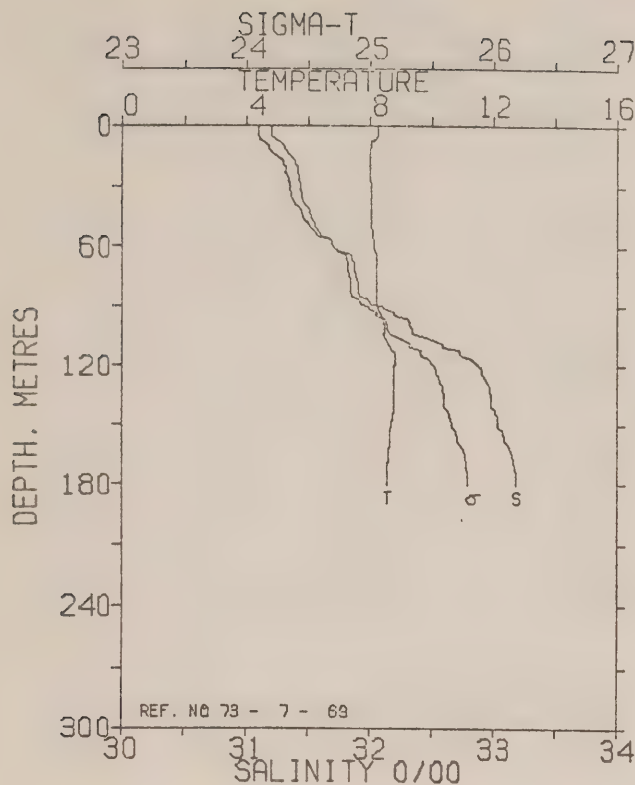
REFERENCE NO. 73- 7- 67 STN- JF4 DATE 13/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 19.3  
 RESULTS OF STD CAST 89 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PGT EN	SOUND VEL
0	8.16	31.19	24.29	364.2	0.0	0.0	1479.
10	7.99	31.21	24.33	360.9	0.36	0.02	1478.
20	7.98	31.30	24.40	354.2	0.72	0.07	1478.
30	7.95	31.42	24.50	344.7	1.07	0.16	1479.
50	7.99	31.48	24.54	341.7	1.76	0.44	1479.
75	8.14	31.87	24.82	315.0	2.59	0.97	1481.
100	8.60	32.55	25.29	271.1	3.33	1.63	1484.
125	8.75	32.86	25.50	251.0	3.97	2.37	1485.
150	8.63	33.07	25.69	233.6	4.59	3.22	1485.
175	8.56	33.17	25.78	225.6	5.16	4.17	1486.

REFERENCE NO. 73- 7- 68 STN- JF10 DATE 13/ 3/73  
 POSITION 48-22.2N, 124- 1.6W PST 19.5  
 RESULTS OF STD CAST 54 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PGT EN	SOUND VEL
0	8.26	31.17	24.26	367.1	0.0	0.0	1479.
10	8.25	31.17	24.26	367.4	0.37	0.02	1479.
20	7.99	31.18	24.31	363.3	0.73	0.07	1478.
30	7.99	31.30	24.40	354.3	1.09	0.17	1479.
50	7.98	31.49	24.55	340.8	1.79	0.45	1479.
75	7.99	31.63	24.66	330.4	2.63	0.58	1480.
100	8.04	31.79	24.78	319.5	3.44	1.71	1481.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.16	31.19	24.29	90.	8.39	32.21	25.05
5.	8.16	31.19	24.29	95.	8.52	32.40	25.18
10.	7.99	31.21	24.33	100.	8.60	32.55	25.29
15.	7.99	31.25	24.36	105.	8.81	32.67	25.35
20.	7.98	31.30	24.40	110.	8.85	32.73	25.39
25.	7.94	31.34	24.44	115.	8.80	32.84	25.46
30.	7.95	31.42	24.50	120.	8.77	32.86	25.50
35.	7.95	31.44	24.51	125.	8.75	32.66	25.50
40.	7.98	31.47	24.53	130.	8.75	32.88	25.52
45.	7.99	31.48	24.54	135.	8.74	32.54	25.57
50.	7.99	31.48	24.54	140.	8.74	32.96	25.58
55.	8.02	31.50	24.55	145.	8.73	32.58	25.61
60.	8.04	31.56	24.59	150.	8.63	33.07	25.69
65.	8.05	31.57	24.60	155.	8.62	33.11	25.72
70.	8.09	31.72	24.72	160.	8.60	33.12	25.73
75.	8.14	31.87	24.82	165.	8.57	33.16	25.77
80.	8.30	32.01	24.91	170.	8.56	33.17	25.77
85.	8.37	32.16	25.02	175.	8.56	33.17	25.78



REFERENCE NO. 73- 7- 69 STN- JF4 DATE 13/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 20.5  
 RESULTS OF STD CAST 102 POINTS TAKEN FROM ANALOG TRACE

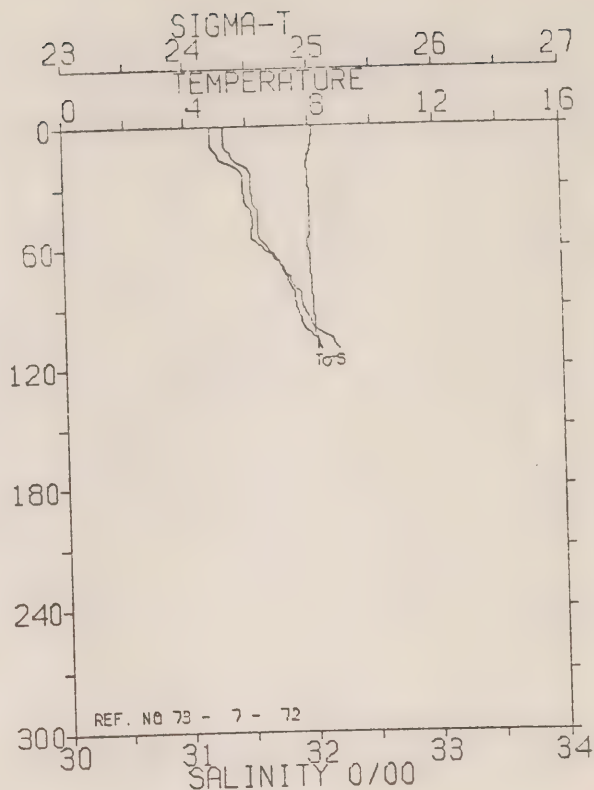
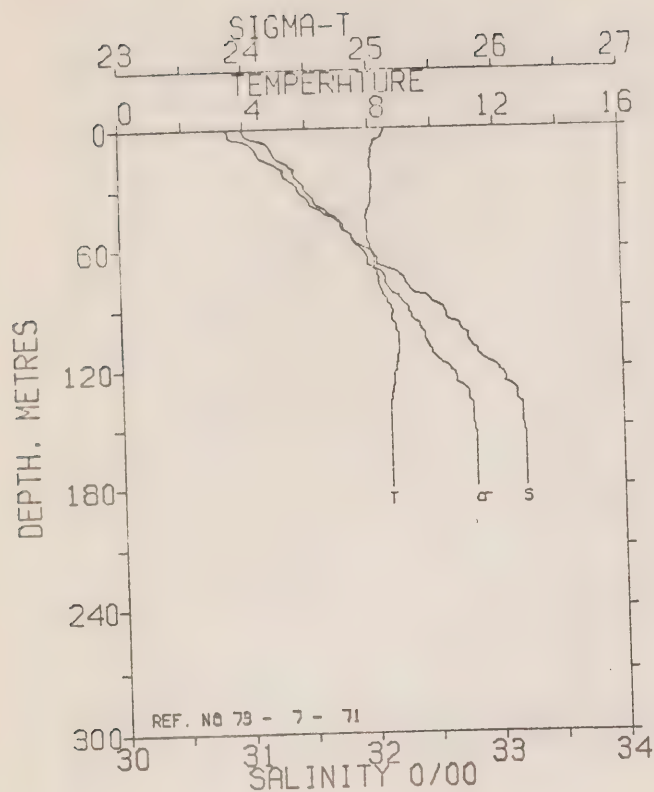
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.26	31.09	24.20	373.0	0.0	0.0	1479.
10	8.03	31.17	24.29	364.5	0.37	0.02	1478.
20	8.01	31.31	24.40	354.0	0.73	0.07	1478.
30	8.02	31.35	24.43	351.3	1.08	0.16	1479.
50	8.06	31.51	24.55	340.5	1.78	0.45	1479.
75	8.20	31.88	24.82	314.7	2.55	0.96	1481.
100	8.45	32.32	25.13	286.0	3.34	1.63	1483.
125	8.77	32.91	25.54	247.3	4.01	2.39	1485.
150	8.67	33.03	25.65	237.2	4.61	3.24	1485.
175	8.55	33.18	25.79	225.0	5.19	4.19	1486.

REFERENCE NO. 73- 7- 70 STN- JF9 DATE 13/ 3/73  
 POSITION 48-15.0N, 124- 6.2W PST 21.5  
 RESULTS OF STD CAST 71 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.29	30.97	24.10	382.4	0.0	0.0	1479.
10	8.06	31.05	24.20	373.7	0.38	0.02	1478.
20	8.05	31.22	24.33	361.1	0.75	0.08	1479.
30	8.11	31.63	24.64	331.7	1.09	0.16	1479.
50	8.69	32.51	25.24	275.0	1.71	0.41	1483.
75	8.76	32.68	25.37	263.3	2.38	0.84	1484.
100	8.75	32.97	25.59	242.2	3.01	1.40	1485.
125	8.67	33.04	25.66	236.2	3.60	2.08	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.26	31.09	24.20	95.	8.38	32.22	25.06
5.	8.25	31.09	24.20	100.	8.45	32.32	25.13
10.	8.03	31.17	24.29	105.	8.45	32.39	25.18
15.	8.01	31.24	24.35	110.	8.60	32.58	25.31
20.	8.01	31.31	24.40	115.	8.79	32.75	25.41
25.	8.01	31.33	24.42	120.	8.77	32.87	25.51
30.	8.02	31.35	24.43	125.	8.77	32.61	25.54
35.	8.03	31.36	24.44	130.	8.78	32.67	25.59
40.	8.03	31.41	24.48	135.	8.77	32.98	25.59
45.	8.03	31.46	24.52	140.	8.75	32.98	25.60
50.	8.06	31.51	24.55	145.	8.71	33.02	25.64
55.	8.07	31.59	24.61	150.	8.67	33.03	25.65
60.	8.10	31.71	24.70	155.	8.62	33.08	25.70
65.	8.18	31.85	24.81	160.	8.60	33.11	25.73
70.	8.19	31.87	24.82	165.	8.59	33.15	25.76
75.	8.20	31.88	24.82	170.	8.56	33.17	25.78
80.	8.21	31.90	24.84	175.	8.55	33.18	25.79
85.	8.20	31.91	24.85	180.	8.55	33.18	25.79

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.29	30.97	24.10	75.	8.76	32.68	25.37
5.	8.06	31.02	24.17	80.	8.77	32.76	25.43
10.	8.06	31.05	24.20	85.	8.77	32.80	25.46
15.	8.04	31.10	24.23	90.	8.78	32.85	25.50
20.	8.05	31.22	24.33	95.	8.75	32.96	25.58
25.	8.04	31.41	24.48	100.	8.75	32.97	25.59
30.	8.11	31.63	24.64	105.	8.72	32.98	25.61
35.	8.14	31.73	24.71	110.	8.71	32.99	25.61
40.	8.15	32.00	24.92	115.	8.70	33.01	25.63
45.	8.43	32.30	25.11	120.	8.69	33.03	25.65
50.	8.69	32.51	25.24	125.	8.67	33.04	25.66
55.	8.70	32.53	25.25	130.	8.62	33.11	25.72
60.	8.75	32.63	25.32	135.	8.60	33.13	25.74
65.	8.76	32.64	25.34	140.	8.55	33.18	25.79



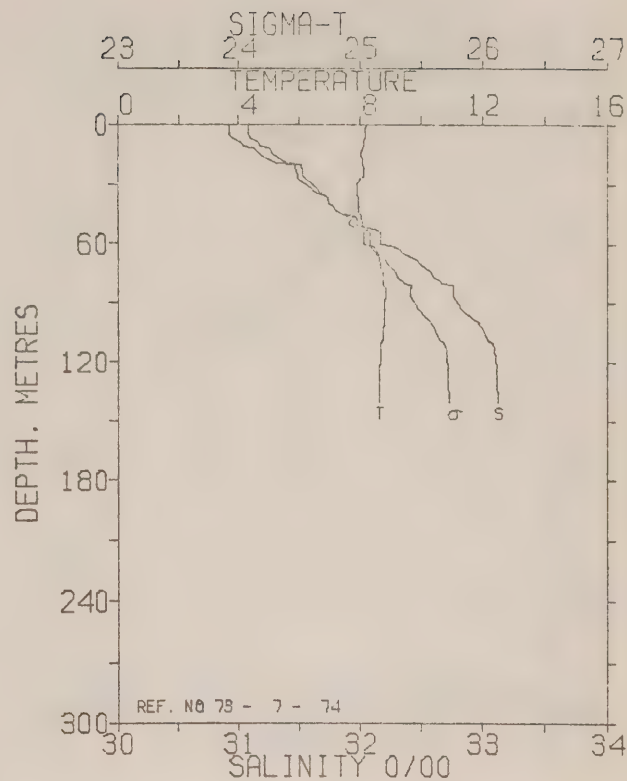
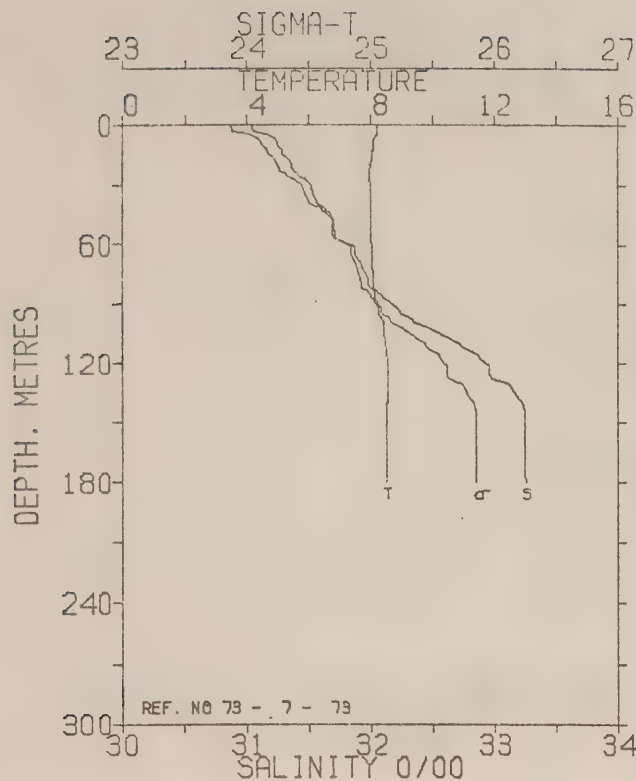
REFERENCE NO. 73- 7- 71 STN- JF4 DATE 13/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 22.5  
 RESULTS OF STD CAST 96 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.50	30.86	23.98	393.5	0.0	0.0	1479.
10	8.09	31.08	24.21	371.9	0.38	0.02	1478.
20	8.06	31.31	24.40	354.6	0.75	0.07	1479.
30	8.06	31.42	24.48	346.6	1.10	0.16	1479.
50	7.90	31.78	24.78	318.1	1.77	0.43	1479.
75	8.25	32.27	25.12	286.8	2.52	0.51	1482.
100	8.77	32.72	25.39	261.5	3.21	1.52	1485.
125	8.69	33.06	25.67	235.3	3.83	2.24	1485.
150	8.54	33.20	25.80	223.0	4.40	3.03	1485.
175	8.53	33.21	25.81	222.5	4.95	3.95	1485.

REFERENCE NO. 73- 7- 72 STN- JF10 DATE 13/ 3/73  
 POSITION 48-22.2N, 124- 1.6W PST 23.5  
 RESULTS OF STD CAST 59 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.11	31.21	24.31	362.0	0.0	0.0	1478.
10	8.06	31.21	24.32	361.9	0.36	0.02	1478.
20	7.90	31.41	24.50	345.0	0.72	0.07	1478.
30	7.96	31.46	24.53	342.3	1.06	0.16	1479.
50	7.97	31.54	24.59	336.9	1.74	0.44	1479.
75	8.03	31.84	24.82	315.3	2.56	0.96	1480.
100	8.11	32.02	24.95	303.5	3.33	1.65	1481.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.50	30.86	23.98	85.	8.50	32.47	25.24
5.	8.25	30.92	24.07	90.	8.64	32.58	25.30
10.	8.09	31.08	24.21	95.	8.64	32.62	25.34
15.	8.03	31.15	24.27	100.	8.77	32.72	25.39
20.	8.06	31.31	24.40	105.	8.84	32.77	25.42
25.	8.08	31.34	24.42	110.	8.84	32.84	25.48
30.	8.06	31.42	24.48	115.	8.78	32.88	25.52
35.	8.05	31.51	24.55	120.	8.74	32.01	25.62
40.	7.93	31.57	24.62	125.	8.69	33.06	25.67
45.	7.87	31.71	24.74	130.	8.62	33.13	25.74
50.	7.90	31.78	24.78	135.	8.57	33.15	25.78
55.	7.92	31.87	24.85	140.	8.55	33.20	25.80
60.	8.02	31.99	24.93	145.	8.54	33.19	25.80
65.	8.10	32.05	24.97	150.	8.54	33.20	25.80
70.	8.12	32.14	25.04	155.	8.53	33.21	25.82
75.	8.25	32.27	25.12	160.	8.53	33.21	25.82



REFERENCE NO. 73- 7- 73 STN- JF4 DATE 14/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 1.0  
 RESULTS OF STD CAST 87 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.18	30.86	24.03	389.1	0.0	0.0	1478.
10	8.08	31.12	24.24	369.2	0.38	0.02	1478.
20	7.96	31.24	24.36	358.5	0.74	0.07	1478.
30	7.96	31.44	24.51	343.8	1.09	0.16	1479.
50	7.99	31.69	24.70	326.0	1.77	0.44	1479.
75	8.07	31.96	24.90	307.4	2.56	0.94	1480.
100	8.42	32.38	25.18	281.1	3.30	1.60	1483.
125	8.54	32.96	25.62	240.3	3.94	2.33	1484.
150	8.50	33.24	25.85	219.1	4.50	3.12	1485.
175	8.50	33.25	25.85	219.2	5.05	4.03	1485.

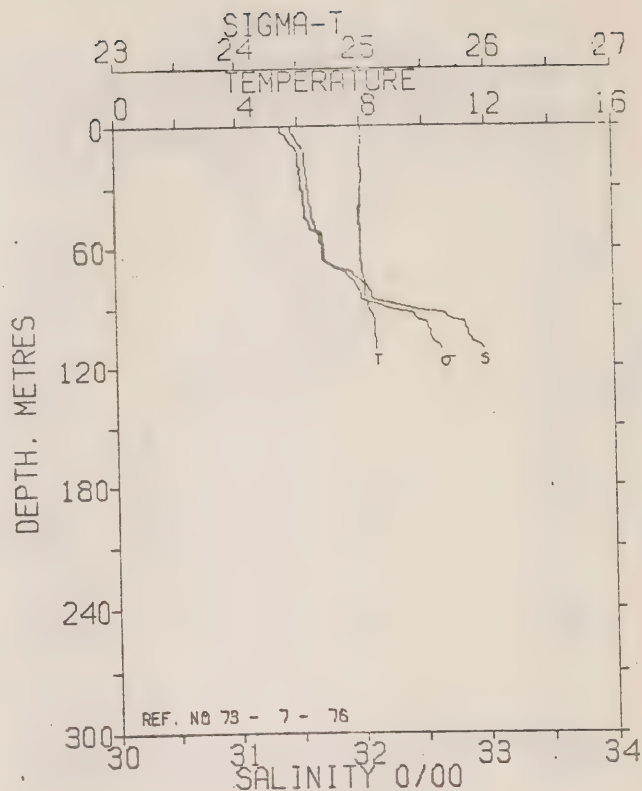
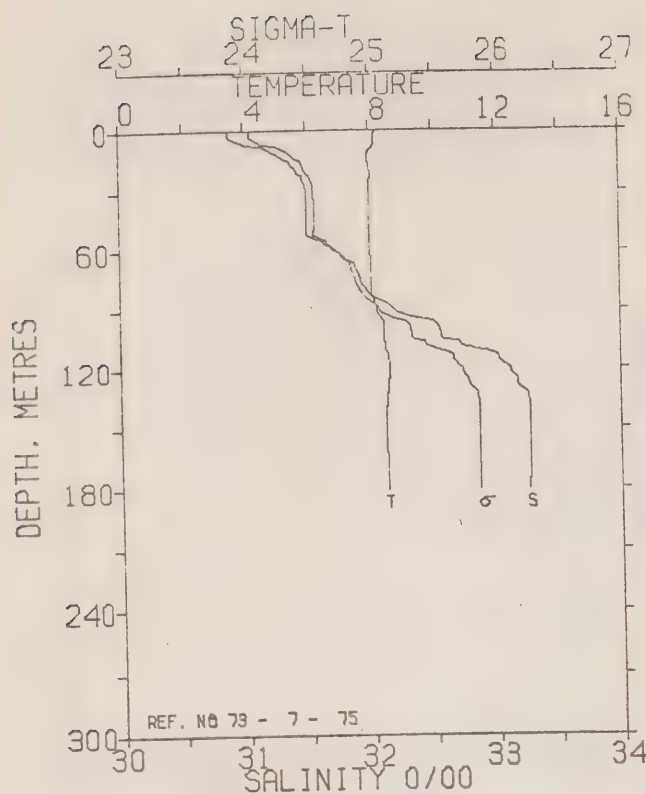
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.18	30.86	24.03	80.	8.08	31.98	24.92
5.	8.15	31.04	24.17	85.	8.10	32.08	25.00
10.	8.08	31.12	24.24	90.	8.18	32.17	25.05
15.	8.06	31.17	24.29	95.	8.28	32.24	25.09
20.	7.96	31.24	24.36	100.	8.42	32.38	25.18
25.	7.96	31.31	24.41	105.	8.43	32.56	25.32
30.	7.96	31.44	24.51	110.	8.47	32.72	25.44
35.	7.97	31.47	24.54	115.	8.50	32.86	25.54
40.	7.97	31.51	24.57	120.	8.53	32.92	25.59
45.	7.98	31.64	24.67	125.	8.54	32.96	25.62
50.	7.99	31.69	24.70	130.	8.57	33.09	25.72
55.	7.99	31.69	24.71	135.	8.54	33.17	25.78
60.	8.02	31.83	24.81	140.	8.50	33.23	25.83
65.	8.06	31.87	24.84	145.	8.50	33.24	25.84
70.	8.06	31.92	24.87	150.	8.50	33.24	25.85

REFERENCE NO. 73- 7- 74 STN- JF9 DATE 14/ 3/73  
 POSITION 48-15.0N, 124- 6.2W PST 1.7  
 RESULTS OF STD CAST 84 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.19	30.91	24.07	385.5	0.0	0.0	1478.
10	8.10	31.03	24.17	376.2	0.38	0.02	1478.
20	8.09	31.46	24.51	343.9	0.75	0.07	1479.
30	7.90	31.56	24.61	334.0	1.05	0.16	1479.
50	8.08	31.98	24.92	305.7	1.73	0.42	1480.
75	8.74	32.58	25.29	270.5	2.44	0.88	1484.
100	8.79	32.97	25.59	242.8	3.08	1.45	1485.
125	8.63	33.12	25.73	230.0	3.67	2.12	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.19	30.91	24.07	70.	8.66	32.48	25.23
5.	8.15	30.92	24.08	75.	8.74	32.58	25.29
10.	8.10	31.03	24.17	80.	8.77	32.67	25.36
15.	8.06	31.17	24.29	85.	8.85	32.76	25.42
20.	8.09	31.46	24.51	90.	8.81	32.60	25.45
25.	8.11	31.49	24.53	95.	8.81	32.67	25.51
30.	7.90	31.56	24.61	100.	8.79	32.97	25.59
35.	7.92	31.69	24.71	105.	8.77	33.01	25.62
40.	7.94	31.74	24.75	110.	8.70	33.08	25.69
45.	7.97	31.86	24.84	115.	8.67	33.10	25.71
50.	8.08	31.98	24.92	120.	8.66	33.11	25.71
55.	8.32	32.18	25.04	125.	8.63	33.12	25.73
60.	8.32	32.18	25.04	130.	8.63	33.12	25.73





REFERENCE NO. 73- 7- 75 STN- JF4 DATE 14/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 2.6  
 RESULTS OF STD CAST 79 POINTS TAKEN FROM ANALOG TRACE

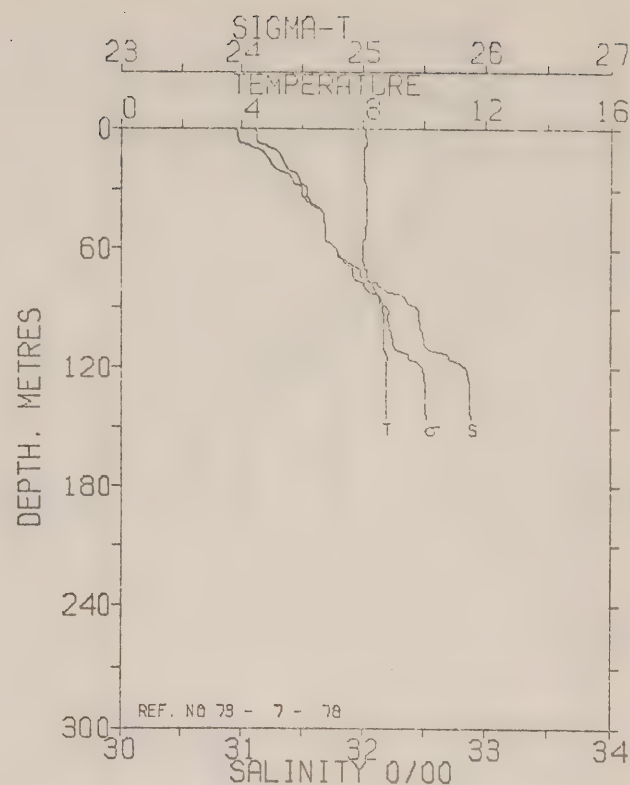
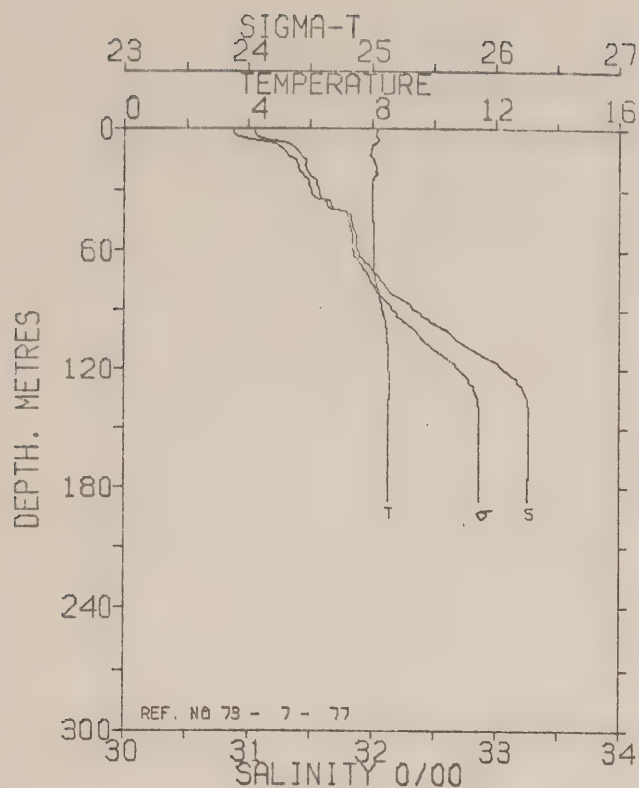
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.18	30.88	24.05	387.6	0.0	0.0	1478.
10	8.01	31.21	24.33	361.2	0.38	0.02	1478.
20	8.02	31.42	24.49	345.8	0.73	0.07	1479.
30	7.97	31.49	24.55	340.0	1.07	0.16	1479.
50	7.96	31.50	24.56	339.8	1.75	0.44	1479.
75	8.05	31.92	24.88	309.6	2.56	0.95	1480.
100	8.40	32.55	25.32	268.5	3.29	1.60	1483.
125	8.56	33.17	25.78	225.3	3.90	2.30	1485.
150	8.49	33.26	25.86	217.5	4.45	3.06	1485.
175	8.49	33.26	25.86	218.2	4.99	3.57	1485.

REFERENCE NO. 73- 7- 76 STN- JF10 DATE 14/ 3/73  
 POSITION 48-22.2N, 124- 1.6W PST 3.7  
 RESULTS OF STD CAST 59 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.06	31.36	24.44	350.2	0.0	0.0	1478.
10	8.00	31.46	24.52	342.4	0.35	0.02	1478.
20	8.01	31.51	24.56	339.1	0.69	0.07	1479.
30	8.00	31.52	24.57	338.4	1.03	0.16	1479.
50	7.97	31.59	24.63	332.8	1.70	0.43	1479.
75	8.08	31.98	24.92	306.0	2.51	0.94	1481.
100	8.43	32.84	25.54	247.6	3.21	1.57	1483.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.18	30.88	24.05	75.	8.05	31.92	24.88
5.	8.15	30.93	24.09	80.	8.06	31.58	24.92
10.	8.01	31.21	24.33	85.	8.13	32.09	25.00
15.	7.95	31.36	24.45	90.	8.22	32.20	25.07
20.	8.02	31.42	24.49	95.	8.40	32.50	25.28
25.	7.98	31.47	24.54	100.	8.40	32.55	25.32
30.	7.97	31.49	24.55	105.	8.42	32.59	25.35
35.	7.97	31.50	24.56	110.	8.48	32.84	25.53
40.	7.96	31.26	24.37	115.	8.57	33.02	25.66
45.	7.88	31.20	24.33	120.	8.58	33.12	25.73
50.	7.93	31.28	24.39	125.	8.56	33.17	25.78
55.	7.98	31.63	24.66	130.	8.53	33.21	25.82
60.	8.00	31.73	24.73	135.	8.50	33.26	25.86
65.	8.03	31.85	24.83	140.	8.49	33.27	25.86
70.	8.05	31.88	24.85	145.	8.49	33.26	25.86

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.06	31.36	24.44	60.	8.00	31.69	24.70
5.	8.06	31.40	24.47	65.	8.00	31.68	24.70
10.	8.00	31.46	24.52	70.	8.03	31.79	24.78
15.	7.99	31.49	24.55	75.	8.08	31.58	24.92
20.	8.01	31.51	24.56	80.	8.13	32.06	24.97
25.	8.01	31.52	24.56	85.	8.13	32.08	24.99
30.	8.00	31.52	24.57	90.	8.23	32.39	25.22
35.	7.97	31.54	24.59	95.	8.38	32.71	25.44
40.	7.95	31.55	24.60	100.	8.43	32.84	25.54
45.	7.95	31.55	24.60	105.	8.44	32.86	25.56
50.	7.97	31.59	24.63	110.	8.47	32.97	25.63



REFERENCE NO. 73-7-77 STN- JF4 DATE 14/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 4.5  
 RESULTS OF STD CAST 77 POINTS TAKEN FROM ANALOG TRACE

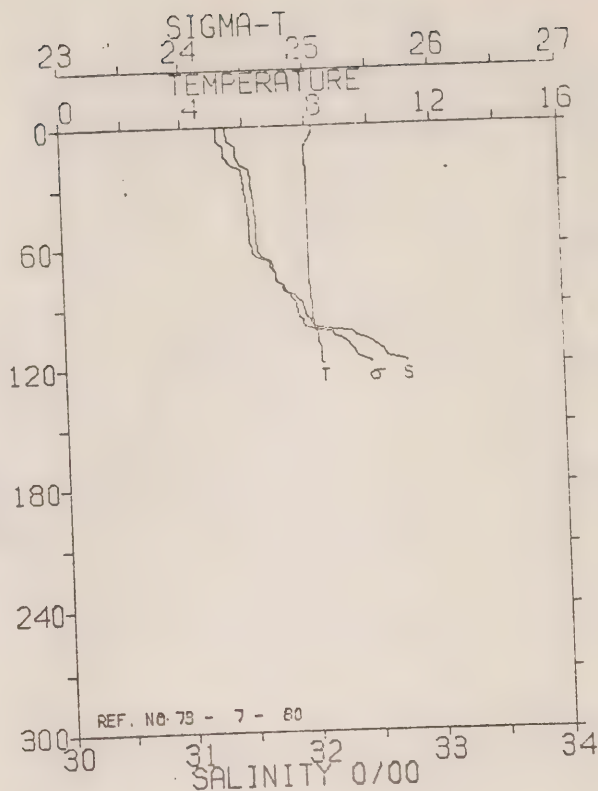
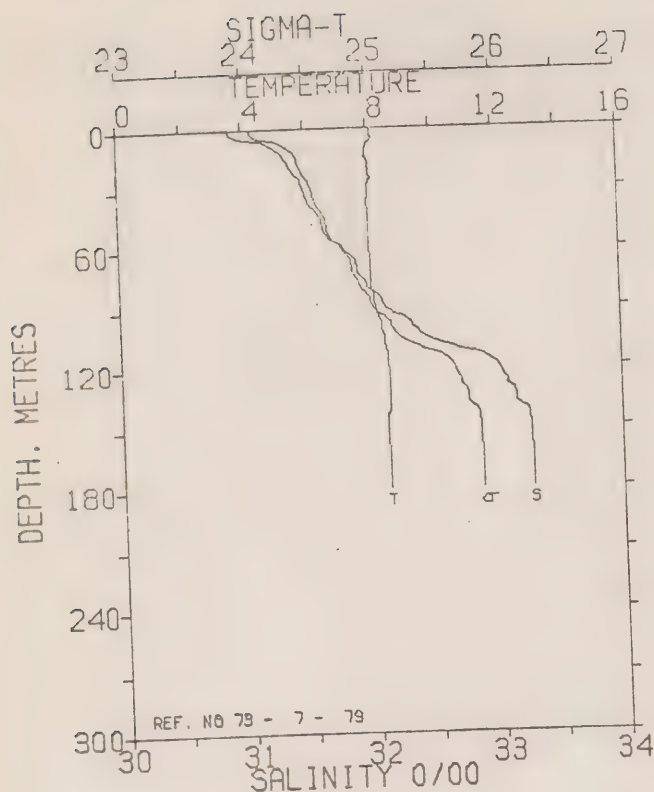
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT. EN	SOUND VEL
0	8.15	30.88	24.05	387.2	0.0	0.0	1478.
10	7.95	31.27	24.38	355.8	0.37	0.02	1478.
20	8.10	31.41	24.47	348.1	0.72	0.07	1479.
30	7.96	31.51	24.57	338.5	1.07	0.16	1479.
50	8.03	31.85	24.83	314.1	1.72	0.42	1480.
75	8.08	32.06	24.98	299.6	2.49	0.92	1481.
100	8.45	32.59	25.34	266.0	3.20	1.55	1483.
125	8.54	33.17	25.78	224.9	3.82	2.25	1485.
150	8.50	33.26	25.86	217.7	4.37	3.02	1485.
175	8.50	33.26	25.86	218.3	4.91	3.92	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.15	30.88	24.05	75.	8.08	32.06	24.98
5.	8.21	31.01	24.14	80.	8.17	32.13	25.02
10.	7.95	31.27	24.38	85.	8.24	32.25	25.10
15.	8.02	31.28	24.46	90.	8.30	32.33	25.16
20.	8.10	31.41	24.47	95.	8.40	32.45	25.24
25.	7.98	31.49	24.55	100.	8.45	32.59	25.34
30.	7.96	31.51	24.57	105.	8.45	32.68	25.41
35.	7.97	31.62	24.65	110.	8.51	32.80	25.50
40.	7.97	31.68	24.70	115.	8.51	32.96	25.62
45.	8.01	31.83	24.81	120.	8.52	33.05	25.69
50.	8.03	31.85	24.83	125.	8.54	33.17	25.78
55.	8.04	31.87	24.84	130.	8.53	33.22	25.82
60.	8.04	31.88	24.84	135.	8.50	33.26	25.85
65.	8.06	31.93	24.88	140.	8.50	33.26	25.86
70.	8.06	31.99	24.93	145.	8.50	33.26	25.86

REFERENCE NO. 73-7-78 STN- JF9 DATE 14/ 3/73  
 POSITION 48-15.0N, 124- 6.2W PST 5.5  
 RESULTS OF STD CAST 76 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT. EN	SOUND VEL
0	8.09	30.95	24.11	381.2	0.0	0.0	1478.
10	8.05	31.13	24.26	367.6	0.38	0.02	1478.
20	8.02	31.28	24.38	356.3	0.74	0.07	1478.
30	8.11	31.50	24.54	341.4	1.09	0.16	1479.
50	8.09	31.69	24.69	327.4	1.75	0.43	1480.
75	8.14	32.00	24.93	304.9	2.55	0.94	1481.
100	8.66	32.47	25.21	278.4	3.26	1.57	1484.
125	8.78	32.86	25.50	251.2	3.93	2.33	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.09	30.95	24.11	70.	8.06	31.57	24.91
5.	8.09	30.97	24.13	75.	8.14	32.00	24.93
10.	8.05	31.13	24.26	80.	8.36	32.16	25.02
15.	8.02	31.22	24.33	85.	8.52	32.35	25.14
20.	8.02	31.28	24.38	90.	8.62	32.43	25.19
25.	8.06	31.42	24.48	95.	8.66	32.45	25.20
30.	8.11	31.50	24.54	100.	8.66	32.47	25.21
35.	8.12	31.52	24.56	105.	8.67	32.49	25.23
40.	8.13	31.65	24.65	110.	8.67	32.53	25.26
45.	8.12	31.68	24.68	115.	8.79	32.70	25.37
50.	8.09	31.69	24.69	120.	8.78	32.84	25.48
55.	8.05	31.69	24.69	125.	8.78	32.86	25.50
60.	7.98	31.79	24.78	130.	8.78	32.88	25.51
65.	7.98	31.84	24.83	135.	8.80	32.86	25.50



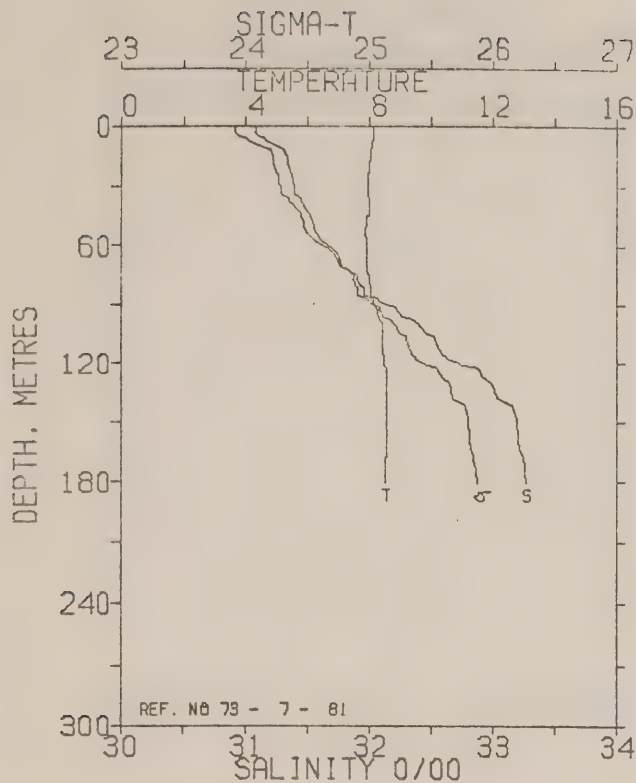
REFERENCE NO. 73-7-79 STN- JF4 DATE 14/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 6.5  
 RESULTS OF STD CAST 90 POINTS TAKEN FROM ANALOG TRACE

REFERENCE NO. 73-7-80 STN- JF10 DATE 13/ 3/73  
 POSITION 48-22.2N, 124- 1.6W PST 23.5  
 RESULTS OF STD CAST 59 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL	DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.14	30.90	24.07	385.6	0.0	0.0	1478.	0	8.18	31.28	24.36	357.7	0.0	0.0	1479.
10	7.95	31.26	24.37	356.6	0.37	0.02	1478.	10	7.96	31.34	24.44	350.7	0.36	0.02	1478.
20	8.06	31.39	24.46	348.6	0.73	0.07	1479.	20	7.99	31.44	24.51	344.0	0.71	0.07	1479.
30	7.97	31.49	24.55	340.2	1.07	0.16	1479.	30	7.97	31.49	24.55	340.0	1.05	0.16	1479.
50	7.98	31.64	24.66	325.7	1.74	0.43	1479.	50	7.97	31.54	24.59	336.9	1.72	0.43	1479.
75	8.06	31.95	24.90	307.5	2.53	0.94	1480.	75	8.00	31.73	24.74	323.1	2.55	0.96	1480.
100	8.33	32.37	25.18	281.0	3.27	1.59	1482.	100	8.12	32.03	24.95	302.9	3.33	1.66	1481.
125	8.54	33.06	25.70	232.5	3.91	2.32	1484.								
150	8.49	33.26	25.86	217.5	4.47	3.10	1485.								
175	8.49	33.27	25.87	217.4	5.01	4.00	1485.								

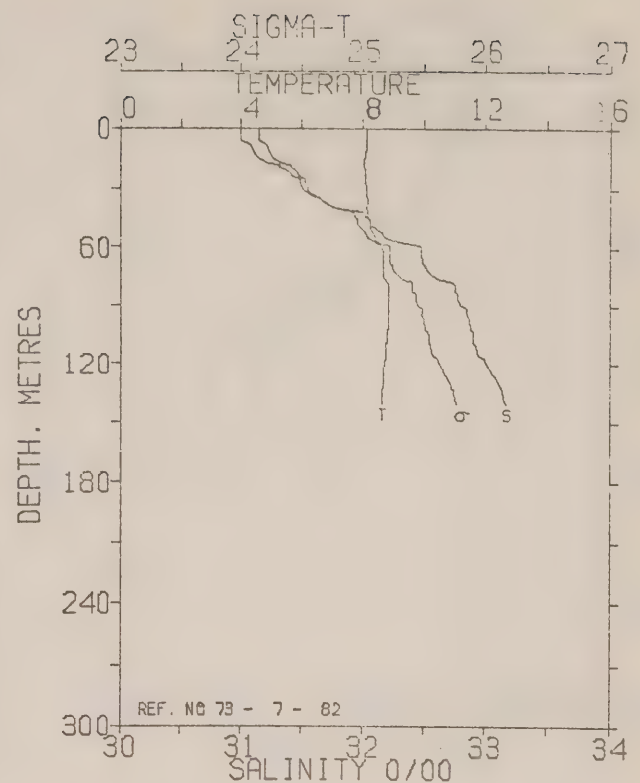
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.14	30.90	24.07	80.	8.07	31.59	24.93	60.	7.93	31.53	24.58
5.	8.16	31.02	24.16	85.	8.13	32.09	24.99	65.	8.00	31.61	24.64
10.	7.95	31.26	24.37	90.	8.18	32.15	25.03	70.	8.00	31.69	24.71
15.	7.95	31.34	24.44	95.	8.29	32.30	25.14	75.	8.00	31.73	24.74
20.	8.06	31.39	24.46	100.	8.33	32.37	25.18	80.	8.02	31.80	24.79
25.	8.10	31.46	24.51	105.	8.42	32.45	25.24	85.	8.07	31.89	24.85
30.	7.97	31.49	24.55	110.	8.46	32.48	25.41	90.	8.08	31.95	24.89
35.	7.96	31.52	24.57	115.	8.51	32.55	25.61	95.	8.09	31.97	24.91
40.	7.96	31.56	24.60	120.	8.53	33.02	25.66	100.	8.12	32.03	24.95
45.	7.97	31.63	24.66	125.	8.54	33.06	25.74	105.	8.23	32.36	25.19
50.	7.98	31.64	24.66	130.	8.54	33.12	25.76	110.	8.31	32.54	25.32
55.	7.98	31.69	24.70	135.	8.56	33.15	25.84	115.	8.33	32.60	25.37
60.	8.01	31.80	24.78	140.	8.52	33.24	25.86				
65.	8.04	31.88	24.85	145.	8.49	33.26	25.86				
70.	8.06	31.90	24.86	150.	8.49	33.26	25.86				
75.	8.06	31.95	24.90	155.	8.49	33.27	25.87				



REFERENCE NO. 73-7-81 STN- JF4 DATE 14/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 8.5  
 RESULTS OF STD CAST 106 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	8.13	30.91	24.08	384.6	0.0	0.0	1478.
10	8.08	31.12	24.24	365.3	0.38	0.02	1478.
20	7.99	31.23	24.34	359.6	0.74	0.07	1478.
30	7.95	31.29	24.40	354.8	1.10	0.17	1478.
50	7.88	31.47	24.54	341.0	1.80	0.45	1479.
75	7.96	31.90	24.88	309.9	2.61	0.97	1480.
100	8.39	32.40	25.20	279.2	3.36	1.63	1483.
125	8.53	32.90	25.57	244.8	4.02	2.39	1484.
150	8.54	33.18	25.79	224.1	4.60	3.21	1485.
175	8.50	33.26	25.86	218.2	5.16	4.12	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.13	30.91	24.08	90.	8.17	32.16	25.05
5.	8.12	30.94	24.10	95.	8.27	32.25	25.10
10.	8.08	31.12	24.24	100.	8.39	32.40	25.20
15.	8.03	31.22	24.33	105.	8.42	32.47	25.25
20.	7.99	31.23	24.34	110.	8.43	32.54	25.31
25.	7.95	31.26	24.38	115.	8.44	32.59	25.34
30.	7.95	31.29	24.40	120.	8.47	32.72	25.44
35.	7.95	31.33	24.43	125.	8.53	32.90	25.57
40.	8.00	31.38	24.46	130.	8.54	33.00	25.65
45.	7.93	31.45	24.52	135.	8.55	33.02	25.66
50.	7.88	31.47	24.54	140.	8.55	33.12	25.74
55.	7.88	31.51	24.58	145.	8.54	33.17	25.78
60.	7.88	31.63	24.67	150.	8.54	33.18	25.79
65.	7.89	31.72	24.75	155.	8.53	33.20	25.81
70.	7.90	31.76	24.77	160.	8.53	33.20	25.81
75.	7.96	31.90	24.88	165.	8.52	33.22	25.82
80.	8.04	31.92	24.88	170.	8.50	33.25	25.85
85.	8.07	31.96	24.91	175.	8.50	33.26	25.86

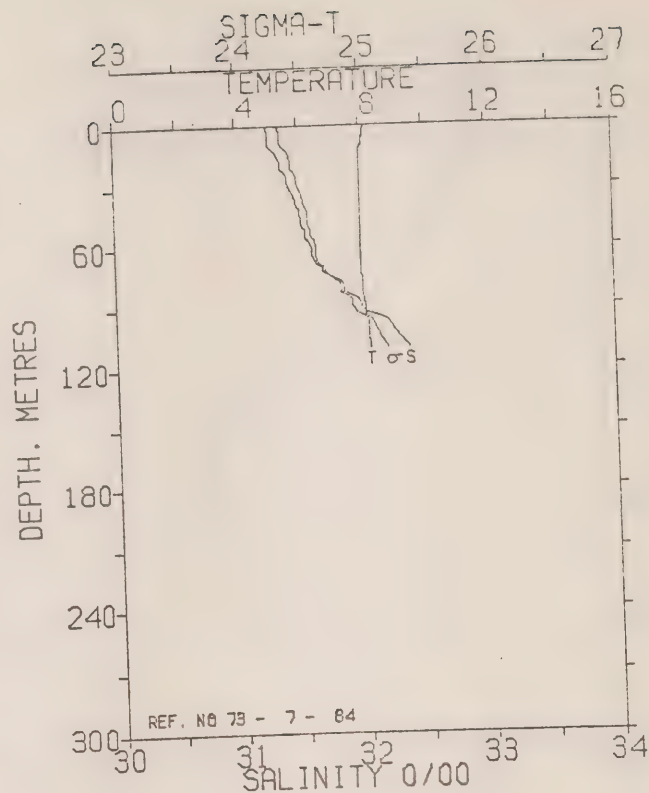
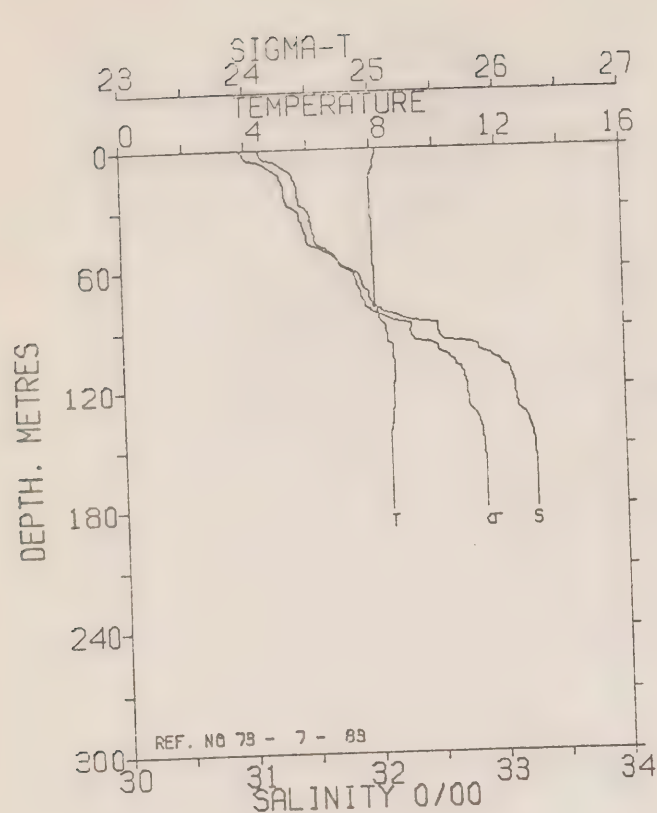


REFERENCE NO. 73-7-82 STN- JF9 DATE 14/ 3/73  
 POSITION 48-15.0N, 124- 6.2W PST 9.5  
 RESULTS OF STD CAST 88 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	8.11	31.00	24.15	377.6	0.0	0.0	1478.
10	8.10	31.09	24.22	371.6	0.38	0.02	1478.
20	8.07	31.36	24.43	351.0	0.74	0.07	1479.
30	8.11	31.51	24.55	340.7	1.08	0.16	1479.
50	8.27	32.11	24.99	298.7	1.72	0.42	1481.
75	8.70	32.56	25.31	265.1	2.42	0.87	1484.
100	8.82	32.88	25.51	249.9	3.06	1.44	1485.
125	8.69	33.06	25.67	234.9	3.67	2.14	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.11	31.00	24.15	75.	8.70	32.59	25.31
5.	8.11	31.00	24.15	80.	8.85	32.75	25.41
10.	8.10	31.09	24.22	85.	8.83	32.78	25.43
15.	8.06	31.14	24.26	90.	8.85	32.82	25.46
20.	8.07	31.36	24.43	95.	8.85	32.86	25.49
25.	8.07	31.49	24.54	100.	8.82	32.88	25.51
30.	8.11	31.51	24.55	105.	8.75	32.91	25.54
35.	8.15	31.66	24.66	110.	8.78	32.92	25.55
40.	8.14	31.79	24.76	115.	8.78	32.95	25.57
45.	8.18	32.05	24.96	120.	8.71	33.01	25.63
50.	8.27	32.11	24.99	125.	8.69	33.06	25.67
55.	8.39	32.20	25.04	130.	8.67	33.11	25.71
60.	8.65	32.48	25.22	135.	8.64	33.14	25.74
65.	8.67	32.48	25.22	140.	8.62	33.17	25.77





REFERENCE NO. 73-7-83 STN- JF4 DATE 14/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 11.0  
 RESULTS OF STD CAST 93 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.12	30.95	24.11	381.6	0.0	0.0	1478.
5	8.03	31.20	24.32	362.2	0.37	0.02	1478.
10	7.95	31.30	24.41	353.9	0.73	0.07	1478.
20	7.94	31.39	24.48	347.3	1.08	0.16	1478.
30	7.97	31.39	24.64	332.1	1.77	0.44	1479.
50	7.97	31.60	24.92	305.4	2.55	0.94	1480.
75	8.06	31.98	25.51	250.4	3.25	1.56	1484.
100	8.60	32.83	25.74	228.7	3.84	2.23	1485.
125	8.59	33.13	25.86	217.4	4.39	3.01	1485.
150	8.49	33.26	25.87	217.3	4.93	3.91	1485.
175	8.48	33.27					

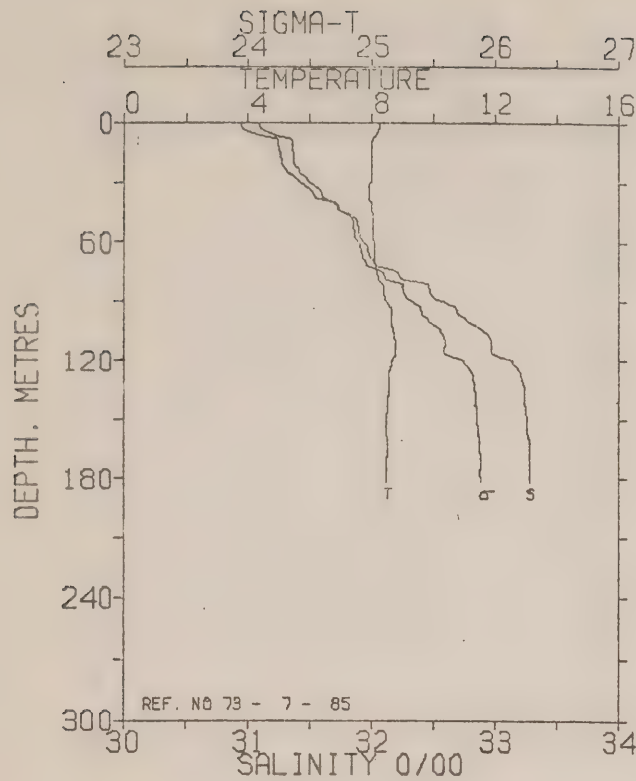
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.12	30.95	24.11	85.	8.23	32.32	25.16
5.	8.13	31.02	24.16	90.	8.39	32.51	25.29
10.	8.03	31.20	24.32	95.	8.42	32.56	25.32
15.	7.95	31.27	24.38	100.	8.60	32.83	25.51
20.	7.95	31.30	24.41	105.	8.60	32.57	25.62
25.	7.95	31.32	24.42	110.	8.64	33.07	25.69
30.	7.94	31.39	24.48	115.	8.62	33.10	25.72
35.	7.97	31.43	24.50	120.	8.60	33.12	25.73
40.	7.97	31.45	24.52	125.	8.59	33.13	25.74
45.	7.97	31.48	24.54	130.	8.57	33.14	25.75
50.	7.97	31.60	24.64	135.	8.52	33.21	25.81
55.	8.00	31.72	24.72	140.	8.50	33.24	25.84
60.	8.04	31.85	24.82	145.	8.49	33.26	25.86
65.	8.06	31.90	24.86	150.	8.49	33.26	25.86
70.	8.06	31.94	24.89	155.	8.48	33.27	25.87
75.	8.06	31.98	24.92	160.	8.48	33.27	25.87
80.	8.12	32.06	24.98	165.	8.48	33.27	25.87

REFERENCE NO. 73-7-84 STN- JF10 DATE 14/ 3/73  
 POSITION 48-22.2N, 124- 1.6W PST 11.5  
 RESULTS OF STD CAST 54 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.15	31.25	24.34	355.6	0.0	0.0	1479.
10	8.02	31.26	24.37	357.5	0.36	0.02	1478.
20	7.98	31.36	24.45	349.8	0.71	0.07	1478.
30	7.99	31.43	24.50	344.9	1.06	0.16	1479.
50	7.96	31.53	24.58	337.2	1.74	0.44	1479.
75	8.03	31.78	24.77	319.8	2.57	0.96	1480.
100	8.20	32.24	25.11	288.4	3.33	1.64	1482.

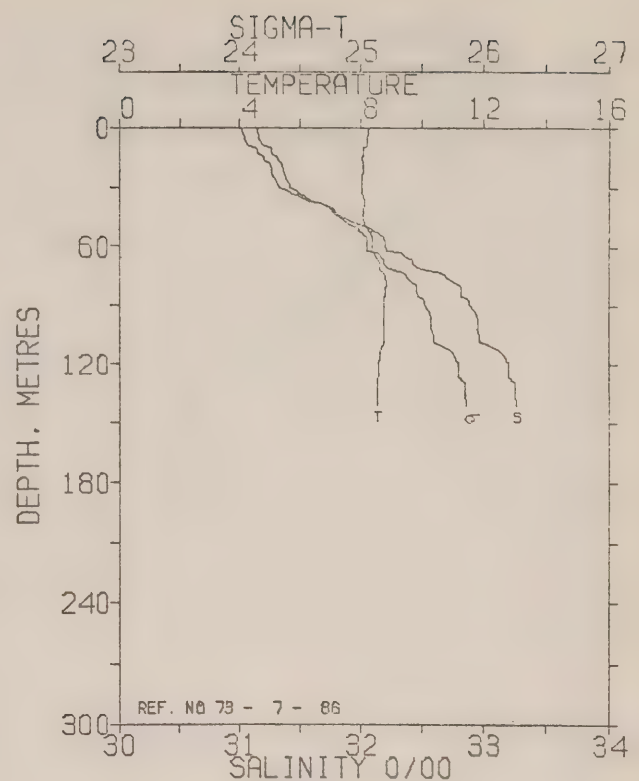
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.15	31.25	24.34	60.	7.97	31.61	24.64
5.	8.10	31.26	24.35	65.	7.97	31.61	24.65
10.	8.02	31.26	24.37	70.	7.98	31.69	24.70
15.	7.98	31.34	24.43	75.	8.03	31.78	24.77
20.	7.98	31.36	24.45	80.	8.06	31.86	24.83
25.	7.99	31.41	24.48	85.	8.08	31.97	24.91
30.	7.99	31.43	24.50	90.	8.10	32.00	24.93
35.	7.99	31.47	24.53	95.	8.16	32.19	25.07
40.	7.99	31.49	24.55	100.	8.20	32.24	25.11
45.	7.96	31.51	24.57	105.	8.22	32.30	25.15
50.	7.96	31.53	24.58	110.	8.25	32.37	25.20



REFERENCE NO. 73-7-85 STN- JF4 DATE 14/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 12.6  
 RESULTS OF STD CAST 90 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.25	30.94	24.08	384.1	0.0	0.0	1479.
10	7.99	31.24	24.35	358.6	0.37	0.02	1478.
20	7.99	31.27	24.38	356.6	0.73	0.07	1478.
30	7.94	31.42	24.50	345.0	1.08	0.16	1479.
50	8.06	31.88	24.84	312.4	1.74	0.43	1480.
75	8.15	32.21	25.09	289.4	2.51	0.92	1481.
100	8.62	32.78	25.46	254.8	3.18	1.52	1484.
125	8.57	33.19	25.80	223.4	3.78	2.21	1485.
150	8.49	33.25	25.85	218.2	4.33	2.98	1485.
175	8.48	33.28	25.88	216.5	4.88	3.88	1485.

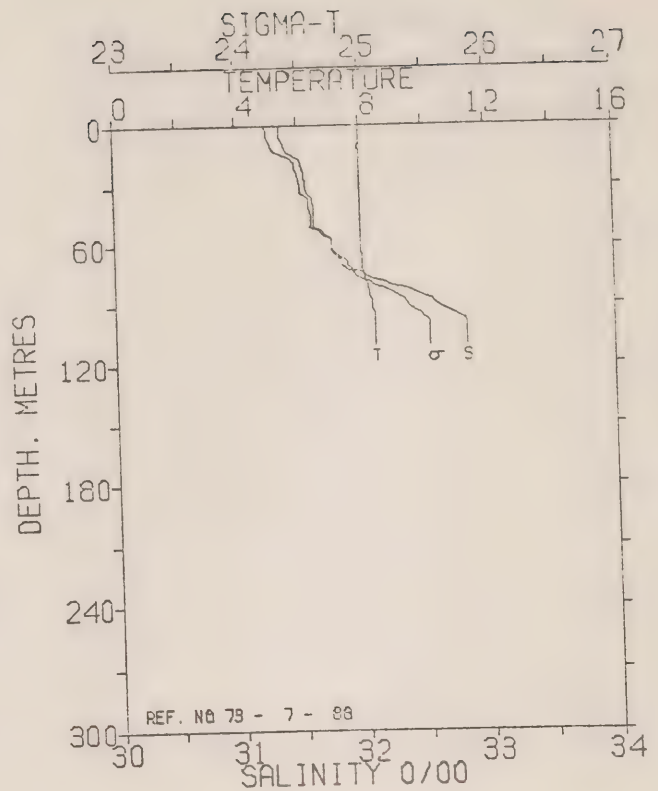
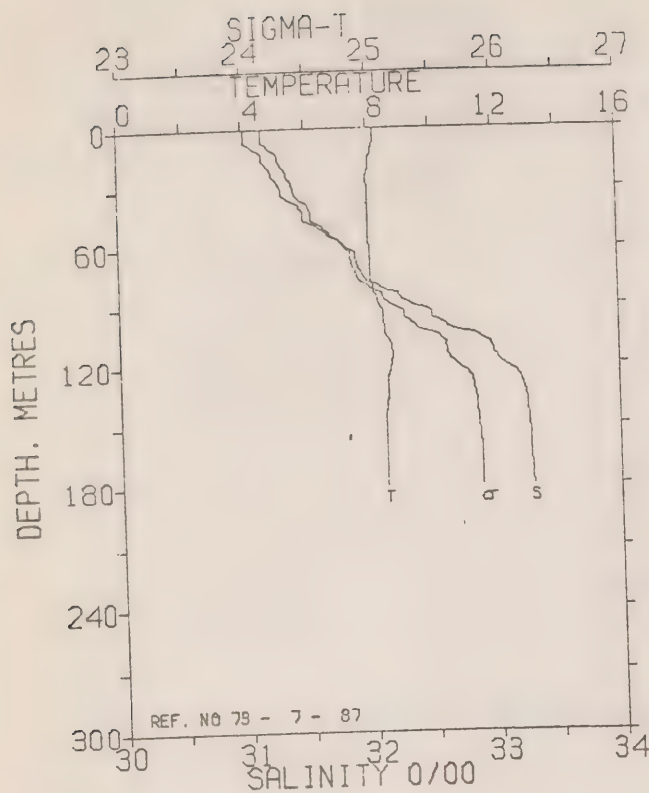
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.25	30.94	24.08	90.	8.47	32.59	25.34
5.	8.15	31.04	24.17	95.	8.62	32.69	25.39
10.	7.99	31.24	24.35	100.	8.62	32.78	25.46
15.	7.98	31.26	24.37	105.	8.70	32.81	25.55
20.	7.99	31.27	24.38	110.	8.76	32.97	25.59
25.	8.01	31.32	24.41	115.	8.77	32.97	25.59
30.	7.94	31.42	24.50	120.	8.64	33.14	25.74
35.	7.88	31.52	24.59	125.	8.57	33.19	25.80
40.	7.97	31.68	24.70	130.	8.53	33.22	25.82
45.	8.00	31.76	24.76	135.	8.52	33.24	25.84
50.	8.06	31.88	24.84	140.	8.51	33.24	25.84
55.	8.06	31.86	24.83	145.	8.50	33.24	25.85
60.	8.06	31.94	24.89	150.	8.49	33.25	25.85
65.	8.08	31.97	24.91	155.	8.49	33.26	25.86
70.	8.09	32.01	24.94	160.	8.49	33.27	25.87
75.	8.15	32.21	25.09	165.	8.49	33.27	25.87
80.	8.31	32.39	25.21	170.	8.48	33.28	25.88
85.	8.38	32.47	25.26	175.	8.49	33.28	25.88



REFERENCE NO. 73-7-86 STN- JF9 DATE 14/ 3/73  
 POSITION 48-15.0N, 124- 6.2W PST 13.6  
 RESULTS OF STD CAST 82 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.24	31.02	24.15	378.0	0.0	0.0	1479.
10	8.09	31.12	24.25	368.9	0.38	0.02	1478.
20	8.09	31.26	24.35	358.7	0.74	0.07	1479.
30	8.04	31.33	24.41	352.1	1.10	0.17	1479.
50	8.17	32.05	24.96	301.7	1.75	0.43	1481.
75	8.79	32.69	25.37	263.0	2.46	0.88	1484.
100	8.76	32.95	25.58	243.8	3.09	1.44	1485.
125	8.59	33.21	25.80	222.7	3.67	2.11	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.24	31.02	24.15	70.	8.61	32.45	25.21
5.	8.22	31.03	24.16	75.	8.79	32.69	25.37
10.	8.09	31.12	24.25	80.	8.81	32.81	25.46
15.	8.06	31.20	24.31	85.	8.78	32.81	25.47
20.	8.09	31.26	24.35	90.	8.77	32.69	25.53
25.	8.06	31.28	24.38	95.	8.76	32.64	25.57
30.	8.04	31.33	24.41	100.	8.76	32.65	25.58
35.	8.09	31.51	24.55	105.	8.76	32.67	25.59
40.	8.11	31.75	24.73	110.	8.74	33.03	25.64
45.	8.07	31.85	24.82	115.	8.61	33.17	25.77
50.	8.17	32.05	24.96	120.	8.59	33.20	25.80
55.	8.37	32.20	25.04	125.	8.59	33.21	25.80
60.	8.38	32.20	25.05	130.	8.54	33.26	25.85
65.	8.50	32.37	25.16	135.	8.53	33.26	25.85



REFERENCE NO. 73- 7- 87 STN- JF4 DATE 14/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 14.5  
 RESULTS OF STD CAST 91 POINTS TAKEN FROM ANALCG TRACE

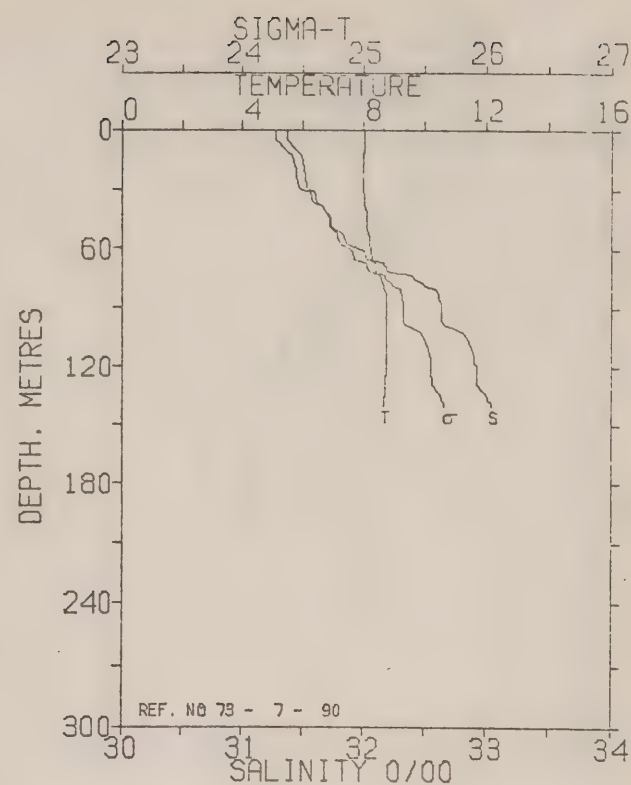
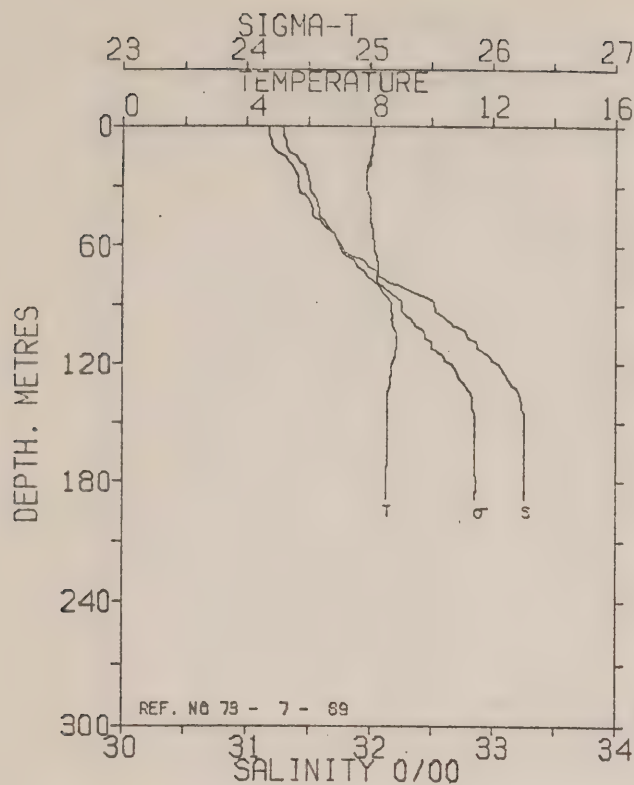
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA ρ	POT EN	SOUND VEL
0	8.21	31.02	24.15	377.6	0.0	0.0	1479.
10	8.14	31.08	24.21	372.6	0.38	0.02	1479.
20	8.04	31.22	24.33	361.0	0.74	0.08	1478.
30	7.96	31.30	24.40	354.3	1.10	0.17	1478.
40	7.98	31.61	24.64	331.8	1.79	0.45	1479.
50	8.06	31.96	24.91	306.8	2.58	0.95	1480.
75	8.45	32.62	25.37	263.8	3.29	1.58	1483.
100	8.55	33.19	25.80	223.1	3.89	2.27	1485.
125	8.49	33.26	25.86	217.5	4.44	3.04	1485.
150	8.48	33.29	25.88	216.0	4.98	3.53	1485.

REFERENCE NO. 73- 7- 88 STN- JF10 DATE 14/ 3/73  
 POSITION 48-22.2N, 124- 1.6W PST 15.6  
 RESULTS OF STD CAST 51 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA ρ	POT EN	SOUND VEL
0	8.00	31.24	24.35	358.3	0.0	0.0	1478.
10	7.95	31.28	24.39	355.1	0.36	0.02	1478.
20	8.01	31.48	24.53	341.5	0.71	0.07	1479.
30	8.01	31.51	24.56	339.0	1.05	0.16	1479.
50	8.00	31.60	24.63	332.9	1.71	0.43	1479.
75	8.11	32.03	24.96	302.3	2.51	0.93	1481.
100	8.42	32.84	25.54	247.0	3.18	1.53	1483.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.21	31.02	24.15	85.	8.23	32.24	25.10
5.	8.19	31.02	24.15	90.	8.34	32.39	25.20
10.	8.14	31.08	24.21	95.	8.40	32.49	25.27
15.	8.06	31.16	24.28	100.	8.45	32.62	25.37
20.	8.04	31.22	24.33	105.	8.51	32.69	25.57
25.	7.95	31.24	24.36	110.	8.68	32.58	25.61
30.	7.96	31.30	24.40	115.	8.72	33.02	25.64
35.	7.98	31.35	24.44	120.	8.64	33.09	25.70
40.	7.97	31.45	24.52	125.	8.55	33.19	25.80
45.	7.97	31.48	24.54	130.	8.52	33.23	25.83
50.	7.98	31.61	24.64	135.	8.51	33.25	25.85
55.	8.00	31.71	24.72	140.	8.50	33.26	25.85
60.	8.03	31.83	24.80	145.	8.49	33.26	25.86
65.	8.05	31.89	24.86	150.	8.49	33.26	25.86
70.	8.06	31.91	24.87	155.	8.48	33.27	25.87
75.	8.06	31.96	24.91	160.	8.48	33.28	25.88
80.	8.13	32.08	24.99	165.	8.48	33.28	25.88

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.00	31.24	24.35	55.	7.57	31.72	24.73
5.	7.99	31.25	24.36	60.	8.00	31.77	24.76
10.	7.95	31.28	24.39	65.	8.02	31.82	24.80
15.	8.00	31.39	24.46	70.	8.03	31.88	24.85
20.	8.01	31.48	24.53	75.	8.11	32.03	24.96
25.	8.01	31.50	24.55	80.	8.18	32.25	25.12
30.	8.01	31.46	24.52	85.	8.27	32.50	25.30
35.	8.02	31.58	24.61	90.	8.34	32.61	25.38
40.	8.00	31.59	24.62	95.	8.41	32.77	25.49
45.	8.00	31.60	24.63	100.	8.42	32.84	25.54



REFERENCE NO. 73-7-89 STN- JF4 DATE 14/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 16.5  
 RESULTS OF STD CAST 85 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT-EN	SOUND VEL
0	8.10	31.17	24.28	364.9	0.0	0.0	1478.
10	8.06	31.20	24.31	362.5	0.36	0.02	1478.
20	7.89	31.37	24.47	348.1	0.72	0.07	1478.
30	7.87	31.41	24.51	344.4	1.07	0.16	1478.
50	8.04	31.63	24.65	331.2	1.74	0.44	1480.
75	8.20	32.06	24.97	301.3	2.54	0.94	1481.
100	8.72	32.67	25.36	264.2	3.23	1.56	1484.
125	8.66	33.10	25.71	231.9	3.85	2.27	1485.
150	8.52	33.25	25.85	218.7	4.41	3.05	1485.
175	8.51	33.25	25.85	219.1	4.96	3.96	1485.

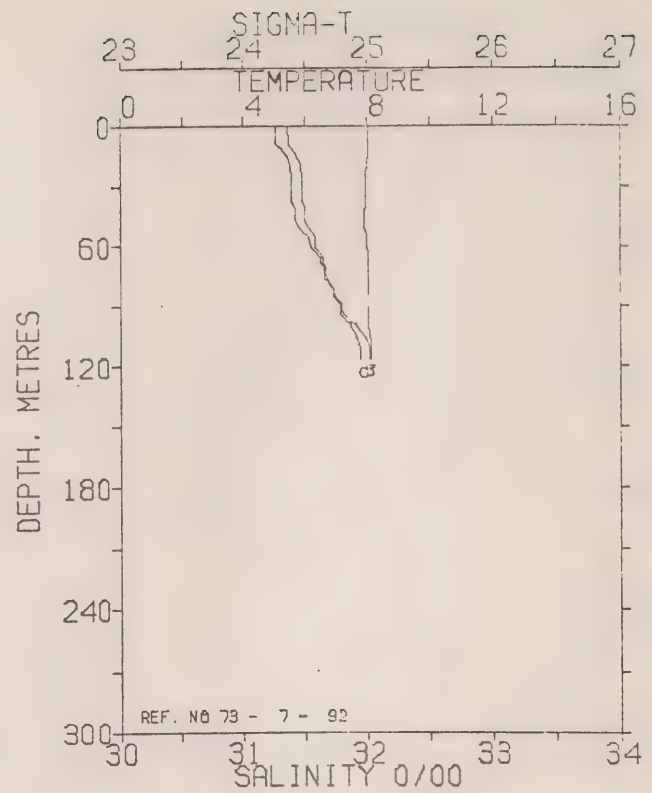
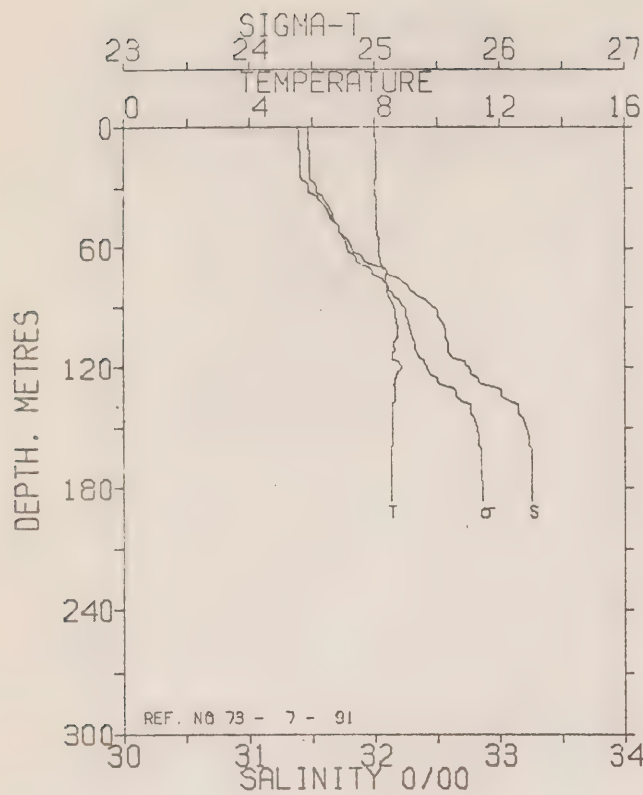
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.10	31.17	24.28	95.	8.71	32.59	25.30
5.	8.08	31.18	24.29	100.	8.72	32.67	25.36
10.	8.06	31.20	24.31	105.	8.85	32.79	25.44
15.	8.01	31.31	24.40	110.	8.84	32.87	25.50
20.	7.89	31.37	24.47	115.	8.79	32.56	25.58
25.	7.87	31.40	24.49	120.	8.70	33.05	25.66
30.	7.87	31.41	24.51	125.	8.66	33.10	25.71
35.	7.94	31.47	24.54	130.	8.61	33.16	25.76
40.	7.97	31.52	24.57	135.	8.55	33.22	25.82
45.	7.97	31.53	24.58	140.	8.53	33.24	25.83
50.	8.04	31.63	24.65	145.	8.52	33.25	25.85
55.	8.08	31.71	24.70	150.	8.52	33.25	25.85
60.	8.11	31.77	24.75	155.	8.56	33.25	25.84
65.	8.17	31.85	24.81	160.	8.50	33.17	25.79
70.	8.25	31.97	24.89	165.	8.50	33.26	25.86
75.	8.20	32.06	24.97	170.	8.50	33.26	25.86
80.	8.31	32.24	25.09	175.	8.50	33.26	25.86
85.	8.50	32.41	25.15	180.	8.51	33.26	25.86

REFERENCE NO. 73-7-90 STN- JF9 DATE 14/ 3/73  
 POSITION 48-15.0N, 124- 6.2W PST 17.5  
 RESULTS OF STD CAST 71 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT-EN	SOUND VEL
0	8.06	31.27	24.37	356.9	0.0	0.0	1478.
10	8.03	31.35	24.43	351.2	0.36	0.02	1478.
20	7.99	31.44	24.51	344.0	0.70	0.07	1479.
30	7.99	31.49	24.55	340.5	1.04	0.16	1479.
50	8.13	31.76	24.74	322.4	1.70	0.43	1480.
75	8.59	32.41	25.18	280.9	2.47	0.91	1483.
100	8.77	32.74	25.41	259.6	3.14	1.51	1485.
125	8.73	32.92	25.56	246.1	3.76	2.22	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.06	31.27	24.37	75.	8.55	32.41	25.18
5.	8.06	31.27	24.37	80.	8.71	32.59	25.30
10.	8.03	31.35	24.43	85.	8.75	32.62	25.32
15.	8.00	31.42	24.49	90.	8.76	32.64	25.34
20.	7.99	31.44	24.51	95.	8.76	32.64	25.33
25.	7.98	31.45	24.52	100.	8.77	32.74	25.41
30.	7.99	31.49	24.55	105.	8.77	32.64	25.49
35.	8.05	31.57	24.60	110.	8.75	32.69	25.53
40.	8.08	31.67	24.67	115.	8.74	32.51	25.55
45.	8.10	31.73	24.72	120.	8.74	32.52	25.55
50.	8.13	31.76	24.74	125.	8.73	32.92	25.56
55.	8.19	31.84	24.79	130.	8.73	32.55	25.58
60.	8.24	31.98	24.89	135.	8.70	33.02	25.64
65.	8.30	32.03	24.92	140.	8.68	33.05	25.66





REFERENCE NO. 73-7-91 STN- JF4 DATE 14/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 18.5  
 RESULTS OF STD CAST 90 POINTS TAKEN FROM ANALOG TRACE

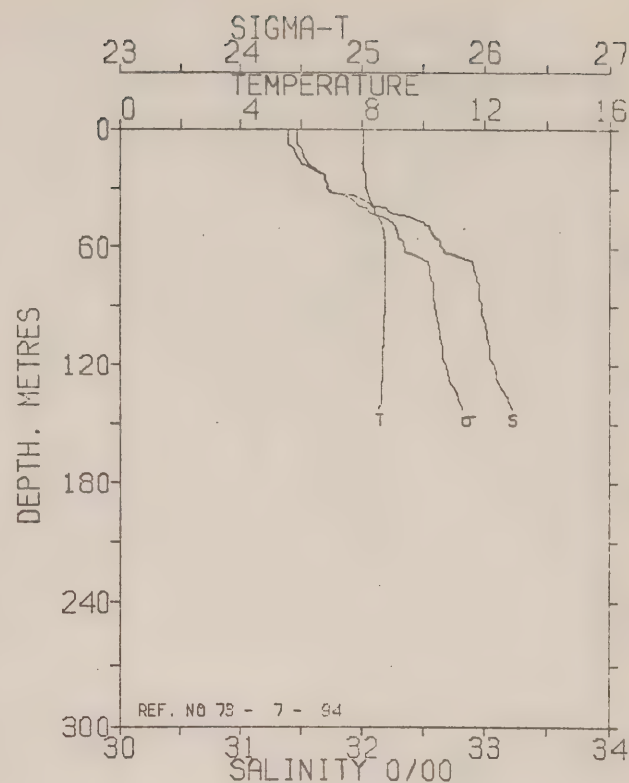
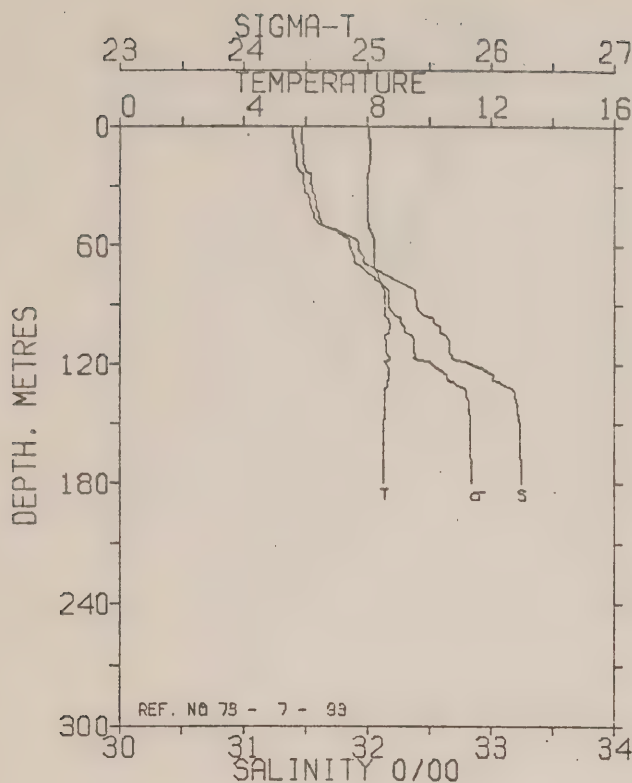
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	8.01	31.38	24.46	348.0	0.0	0.0	1478.
10	8.02	31.39	24.47	347.8	0.35	0.02	1478.
20	8.03	31.40	24.47	347.5	0.70	0.07	1479.
30	8.00	31.46	24.53	342.5	1.04	0.16	1479.
50	8.07	31.71	24.71	325.3	1.71	0.43	1480.
75	8.33	32.19	25.05	293.5	2.49	0.93	1482.
100	8.71	32.56	25.28	272.4	3.19	1.55	1484.
125	8.63	32.82	25.49	252.3	3.86	2.31	1485.
150	8.53	33.21	25.82	221.8	4.44	3.13	1485.
175	8.50	33.25	25.85	219.1	4.99	4.04	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.01	31.38	24.46	90.	8.59	32.48	25.24
5.	8.01	31.39	24.47	95.	8.66	32.51	25.25
10.	8.02	31.38	24.46	100.	8.71	32.56	25.28
15.	8.03	31.40	24.47	105.	8.67	32.57	25.29
20.	8.03	31.40	24.47	110.	8.60	32.59	25.32
25.	8.01	31.40	24.48	115.	8.54	32.63	25.36
30.	8.00	31.46	24.53	120.	8.81	32.75	25.41
35.	8.03	31.54	24.58	125.	8.63	32.82	25.49
40.	8.06	31.61	24.63	130.	8.63	32.99	25.62
45.	8.06	31.64	24.65	135.	8.63	33.04	25.66
50.	8.07	31.71	24.71	140.	8.55	33.16	25.77
55.	8.10	31.77	24.75	145.	8.54	33.18	25.79
60.	8.13	31.81	24.78	150.	8.53	33.21	25.82
65.	8.15	31.90	24.85	155.	8.53	33.23	25.83
70.	8.26	32.08	24.97	160.	8.51	33.25	25.85
75.	8.33	32.19	25.05	165.	8.50	33.25	25.85
80.	8.37	32.27	25.10	170.	8.50	33.23	25.84
85.	8.47	32.39	25.18	175.	8.50	33.26	25.86

REFERENCE NO. 73-7-92 STN- JF10 DATE 14/ 3/73  
 POSITION 48-22.2N, 124- 1.6W PST 19.5  
 RESULTS OF STD CAST 51 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	8.06	31.26	24.36	357.6	0.0	0.0	1478.
10	8.05	31.27	24.37	357.2	0.36	0.02	1478.
20	7.97	31.38	24.46	348.3	0.71	0.07	1473.
30	7.96	31.39	24.47	347.4	1.06	0.16	1479.
50	7.93	31.45	24.52	343.1	1.75	0.44	1479.
75	8.05	31.65	24.67	329.7	2.59	0.58	1480.
100	8.06	31.92	24.87	310.6	3.39	1.69	1481.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.06	31.26	24.36	60.	8.00	31.54	24.59
5.	8.05	31.26	24.36	65.	8.05	31.61	24.64
10.	8.05	31.27	24.37	70.	8.05	31.64	24.66
15.	8.03	31.35	24.43	75.	8.05	31.65	24.67
20.	7.97	31.38	24.46	80.	8.06	31.71	24.71
25.	7.96	31.39	24.47	85.	8.06	31.74	24.74
30.	7.96	31.39	24.47	90.	8.05	31.80	24.78
35.	7.95	31.39	24.47	95.	8.06	31.83	24.81
40.	7.94	31.41	24.49	100.	8.06	31.82	24.87
45.	7.93	31.42	24.50	105.	8.05	31.87	24.91
50.	7.93	31.45	24.52	110.	8.12	32.01	24.94
55.	7.97	31.54	24.59	115.	8.13	32.02	24.94



REFERENCE NO. 73-7-93 STN- JF4 DATE 14/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 20.5  
 RESULTS OF STD CAST 84 POINTS TAKEN FROM ANALOG TRACE

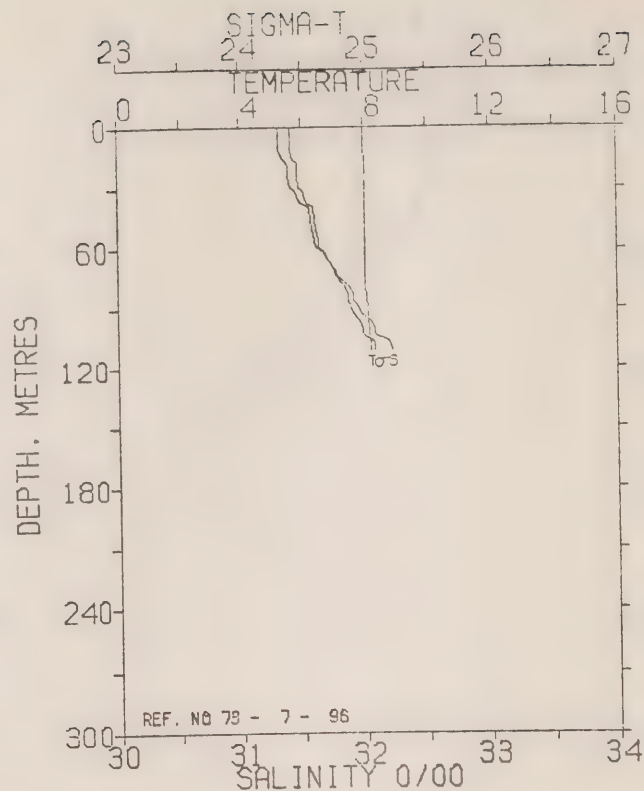
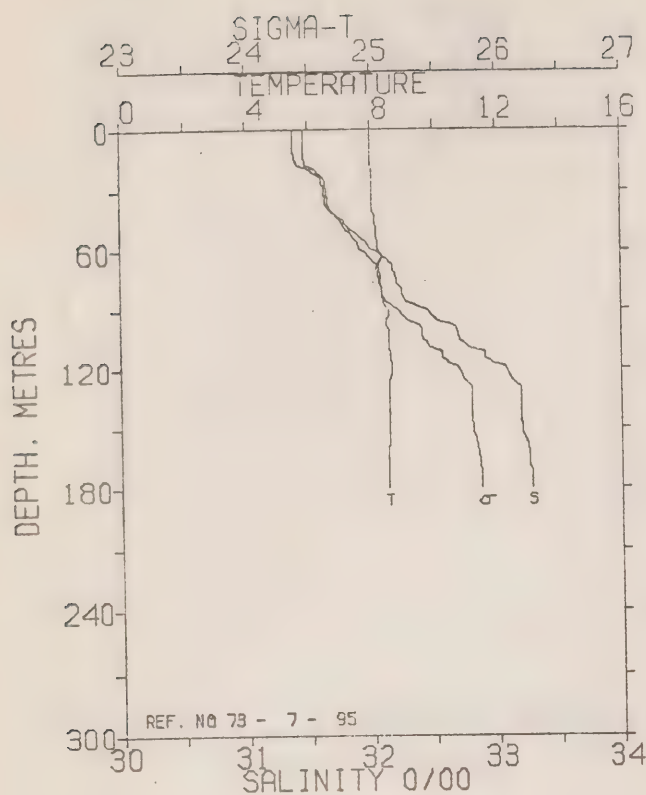
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.06	31.39	24.46	347.9	0.0	0.0	1478.
10	8.08	31.41	24.47	347.2	0.35	0.02	1479.
20	8.07	31.43	24.49	346.1	0.69	0.07	1479.
30	8.01	31.49	24.54	340.7	1.04	0.16	1479.
50	8.04	31.63	24.65	331.2	1.71	0.43	1480.
75	8.31	32.16	25.03	295.3	2.49	0.93	1482.
100	8.71	32.55	25.27	272.8	3.20	1.56	1484.
125	8.66	33.01	25.64	238.6	3.85	2.30	1485.
150	8.51	33.23	25.83	220.3	4.41	3.09	1485.
175	8.50	33.24	25.84	220.0	4.96	4.00	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.06	31.39	24.46	85.	8.54	32.38	25.17
5.	8.06	31.39	24.46	90.	8.54	32.38	25.17
10.	8.08	31.41	24.47	95.	8.54	32.45	25.22
15.	8.09	31.42	24.48	100.	8.71	32.55	25.27
20.	8.07	31.43	24.49	105.	8.56	32.63	25.36
25.	8.01	31.48	24.54	110.	8.58	32.66	25.38
30.	8.01	31.49	24.54	115.	8.62	32.68	25.38
35.	8.01	31.52	24.57	120.	8.58	32.84	25.52
40.	7.99	31.53	24.58	125.	8.66	33.01	25.64
45.	8.00	31.56	24.60	130.	8.63	33.09	25.70
50.	8.04	31.63	24.65	135.	8.54	33.19	25.80
55.	8.15	31.84	24.80	140.	8.52	33.22	25.82
60.	8.19	31.92	24.86	145.	8.52	33.22	25.82
65.	8.19	31.96	24.89	150.	8.51	33.23	25.83
70.	8.22	32.00	24.91	155.	8.51	33.23	25.84
75.	8.31	32.16	25.03	160.	8.50	33.23	25.84

REFERENCE NO. 73-7-94 STN- JF9 DATE 14/ 3/73  
 POSITION 48-15.0N, 124- 6.2W PST 21.5  
 RESULTS OF STD CAST 78 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.03	31.39	24.47	347.6	0.0	0.0	1478.
10	8.02	31.43	24.50	344.8	0.35	0.02	1479.
20	8.06	31.59	24.62	333.7	0.69	0.07	1479.
30	8.13	31.72	24.71	325.2	1.02	0.15	1480.
50	8.69	32.55	25.28	271.5	1.61	0.39	1483.
75	8.76	32.93	25.56	244.8	2.25	0.60	1484.
100	8.71	33.01	25.63	238.8	2.86	1.34	1485.
125	8.67	33.09	25.70	232.4	3.45	2.02	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.03	31.39	24.47	75.	8.76	32.93	25.56
5.	8.04	31.39	24.46	80.	8.76	32.95	25.58
10.	8.02	31.43	24.50	85.	8.76	32.96	25.59
15.	8.02	31.48	24.54	90.	8.73	32.97	25.60
20.	8.06	31.59	24.62	95.	8.72	32.99	25.61
25.	8.12	31.70	24.69	100.	8.71	33.01	25.63
30.	8.13	31.72	24.71	105.	8.71	33.02	25.64
35.	8.24	31.98	24.90	110.	8.69	33.04	25.66
40.	8.39	32.20	25.04	115.	8.70	33.05	25.66
45.	8.55	32.42	25.19	120.	8.69	33.08	25.69
50.	8.69	32.55	25.28	125.	8.67	33.09	25.70
55.	8.73	32.60	25.30	130.	8.63	33.13	25.73
60.	8.75	32.66	25.35	135.	8.61	33.18	25.78
65.	8.76	32.83	25.48	140.	8.57	33.21	25.80



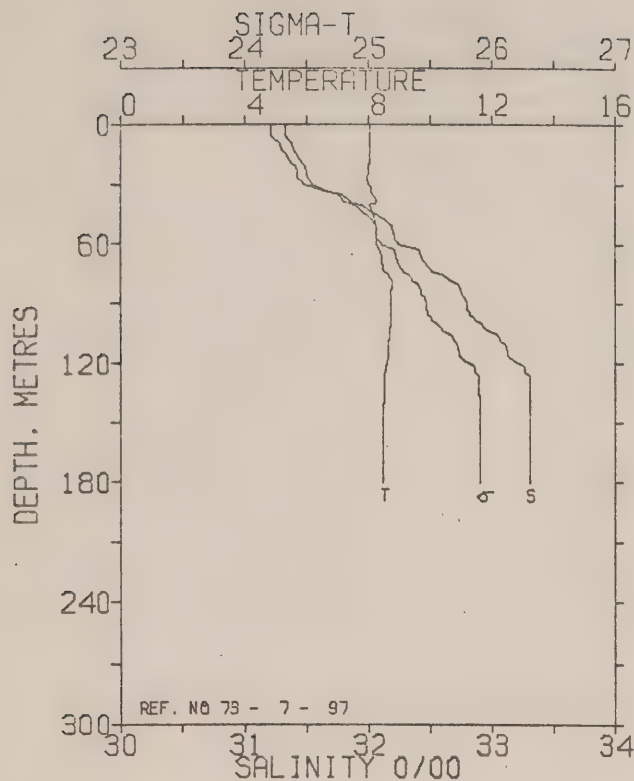
REFERENCE NO. 73- 7- 95 STN- JF4 DATE 14/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 22.5  
 RESULTS OF STD CAST 90 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.01	31.38	24.46	348.0	0.0	0.0	1478.
10	8.01	31.38	24.46	348.5	0.35	0.02	1478.
20	8.03	31.51	24.56	339.2	0.69	0.07	1479.
30	8.05	31.62	24.64	331.2	1.03	0.16	1479.
50	8.16	31.85	24.80	316.4	1.68	0.42	1480.
75	8.30	32.20	25.06	292.3	2.43	0.90	1482.
100	8.53	32.68	25.40	260.5	3.14	1.52	1484.
125	8.57	33.12	25.74	229.1	3.75	2.23	1485.
150	8.53	33.20	25.81	222.5	4.31	3.01	1485.
175	8.50	33.27	25.87	217.5	4.86	3.92	1485.

REFERENCE NO. 73- 7- 96 STN- JF10 DATE 14/ 3/73  
 POSITION 48-22.2N, 124- 1.6W PST 23.5  
 RESULTS OF STD CAST 46 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.00	31.31	24.41	353.1	0.0	0.0	1478.
10	8.00	31.32	24.41	353.1	0.35	0.02	1478.
20	8.02	31.39	24.46	348.3	0.70	0.07	1479.
30	8.03	31.41	24.48	347.0	1.05	0.16	1479.
50	8.03	31.58	24.62	334.3	1.73	0.44	1479.
75	8.04	31.81	24.79	317.7	2.55	0.96	1480.
100	8.16	32.08	24.99	299.8	3.32	1.64	1481.

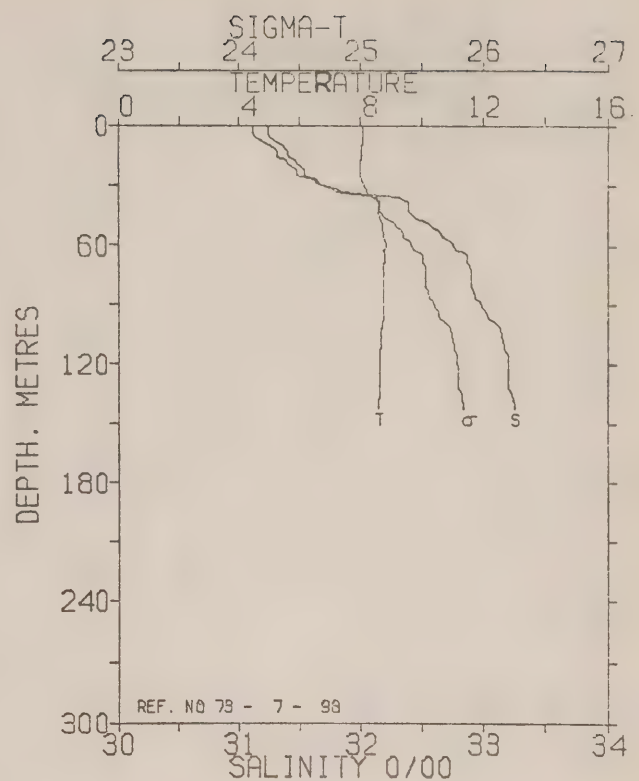
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.01	31.38	24.46	90.	8.53	32.44	25.21
5.	8.01	31.38	24.46	95.	8.48	32.53	25.29
10.	8.01	31.36	24.44	100.	8.53	32.68	25.40
15.	8.01	31.35	24.47	105.	8.54	32.70	25.41
20.	8.03	31.51	24.56	110.	8.56	32.86	25.54
25.	8.04	31.60	24.63	115.	8.60	32.55	25.60
30.	8.05	31.62	24.64	120.	8.62	33.07	25.69
35.	8.05	31.64	24.66	125.	8.57	33.12	25.74
40.	8.06	31.67	24.68	130.	8.54	33.19	25.79
45.	8.13	31.78	24.75	135.	8.54	33.18	25.79
50.	8.16	31.85	24.80	140.	8.53	33.12	25.75
55.	8.20	31.96	24.88	145.	8.53	33.20	25.81
60.	8.24	32.05	24.95	150.	8.53	33.20	25.81
65.	8.26	32.13	25.01	155.	8.53	33.22	25.82
70.	8.27	32.17	25.04	160.	8.52	33.24	25.84
75.	8.30	32.20	25.06	165.	8.50	33.26	25.86
80.	8.34	32.24	25.09	170.	8.50	33.27	25.86
85.	8.37	32.27	25.11	175.	8.50	33.27	25.87



REFERENCE NO. 73- 7- 97 STN- JF4 DATE 15/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 0.6  
 RESULTS OF STD CAST 85 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.02	31.21	24.33	360.8	0.0	0.0	1478.
10	8.04	31.28	24.38	356.4	0.36	0.02	1478.
20	8.00	31.38	24.46	348.6	0.71	0.07	1479.
30	7.97	31.48	24.54	340.9	1.06	0.16	1479.
50	8.22	32.18	25.05	292.7	1.68	0.41	1481.
75	8.60	32.59	25.32	267.7	2.39	0.86	1483.
100	8.71	32.91	25.55	246.1	3.05	1.43	1485.
125	8.52	33.29	25.88	215.8	3.61	2.09	1485.
150	8.49	33.31	25.90	213.8	4.14	2.84	1485.
175	8.49	33.31	25.90	214.4	4.68	3.73	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.02	31.21	24.33	80.	8.77	32.72	25.40
5.	8.02	31.21	24.33	85.	8.72	32.75	25.43
10.	8.04	31.28	24.38	90.	8.72	32.80	25.47
15.	8.02	31.33	24.42	95.	8.73	32.81	25.47
20.	8.00	31.38	24.46	100.	8.71	32.91	25.55
25.	7.97	31.42	24.50	105.	8.68	33.04	25.66
30.	7.97	31.48	24.54	110.	8.63	33.10	25.71
35.	8.11	31.79	24.76	115.	8.63	33.13	25.73
40.	8.09	31.89	24.84	120.	8.57	33.22	25.81
45.	8.12	32.06	24.97	125.	8.52	33.29	25.88
50.	8.22	32.18	25.05	130.	8.50	33.31	25.89
55.	8.26	32.20	25.07	135.	8.50	33.31	25.90
60.	8.27	32.25	25.10	140.	8.49	33.32	25.90
65.	8.39	32.42	25.22	145.	8.49	33.31	25.90
70.	8.42	32.46	25.24	150.	8.49	33.31	25.90
75.	8.40	32.59	25.32	155.	8.48	33.31	25.90

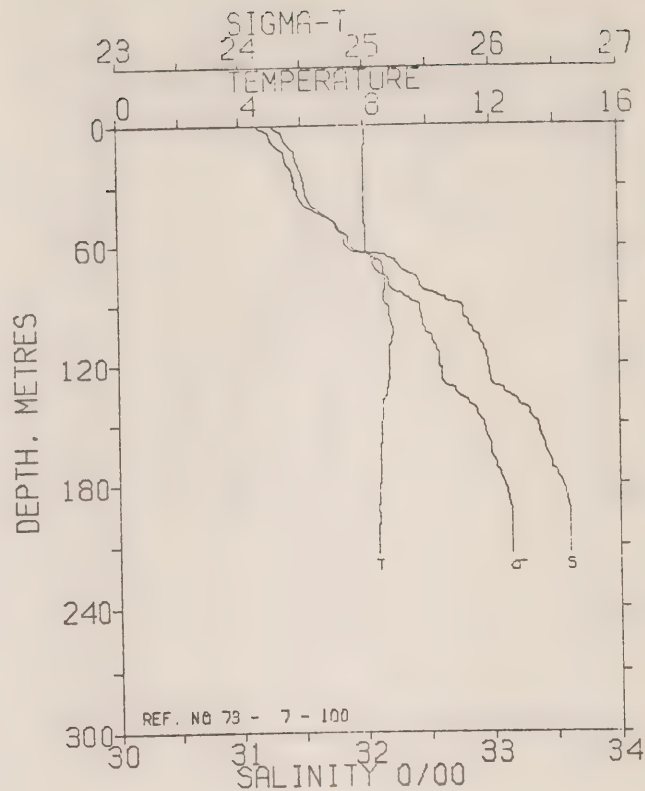
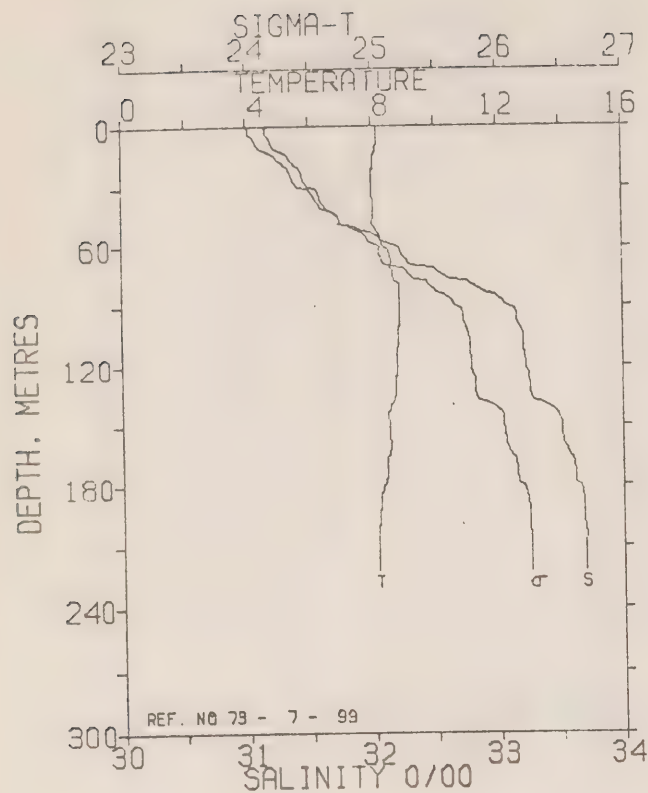


REFERENCE NO. 73- 7- 98 STN- JF9 DATE 15/ 3/73  
 POSITION 48-15.0N, 124- 6.2W PST 1.7  
 RESULTS OF STD CAST 78 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.09	31.11	24.24	369.2	0.0	0.0	1478.
10	8.06	31.25	24.35	358.8	0.37	0.02	1478.
20	7.98	31.42	24.49	345.3	0.72	0.07	1479.
30	8.12	31.69	24.69	326.9	1.06	0.16	1480.
50	8.72	32.57	25.29	270.5	1.63	0.39	1483.
75	8.78	32.90	25.54	247.3	2.27	0.80	1484.
100	8.73	33.11	25.71	231.5	2.88	1.34	1485.
125	8.63	33.21	25.80	223.2	3.44	1.98	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.09	31.11	24.24	75.	8.78	32.90	25.54
5.	8.08	31.12	24.25	80.	8.79	32.90	25.53
10.	8.06	31.25	24.35	85.	8.77	32.93	25.56
15.	8.03	31.32	24.41	90.	8.78	32.99	25.60
20.	7.98	31.42	24.49	95.	8.76	33.03	25.64
25.	7.99	31.48	24.54	100.	8.73	33.11	25.71
30.	8.12	31.69	24.69	105.	8.70	33.15	25.75
35.	8.37	32.19	25.04	110.	8.67	33.16	25.76
40.	8.59	32.39	25.16	115.	8.63	33.20	25.79
45.	8.60	32.42	25.19	120.	8.63	33.20	25.79
50.	8.72	32.57	25.29	125.	8.63	33.21	25.80
55.	8.76	32.66	25.35	130.	8.66	33.19	25.78
60.	8.81	32.76	25.42	135.	8.60	33.24	25.82
65.	8.79	32.87	25.51	140.	8.59	33.26	25.84





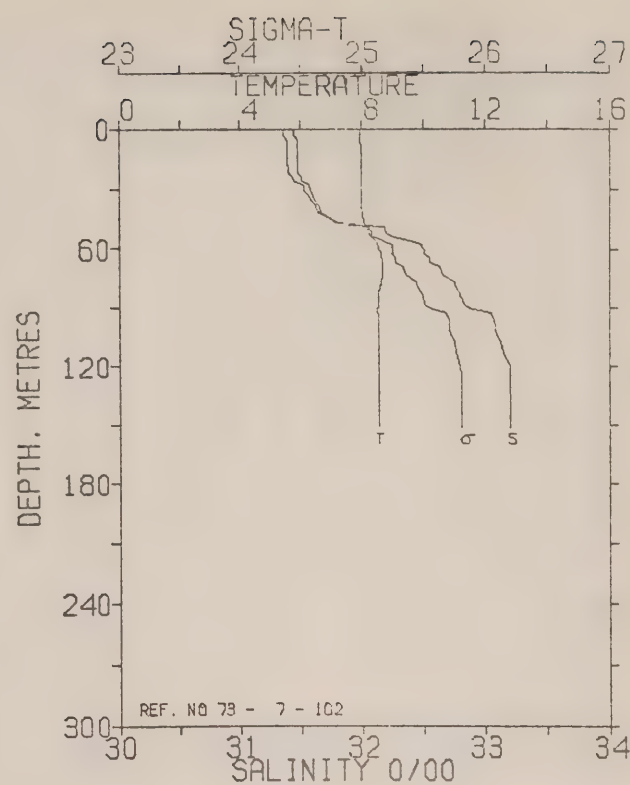
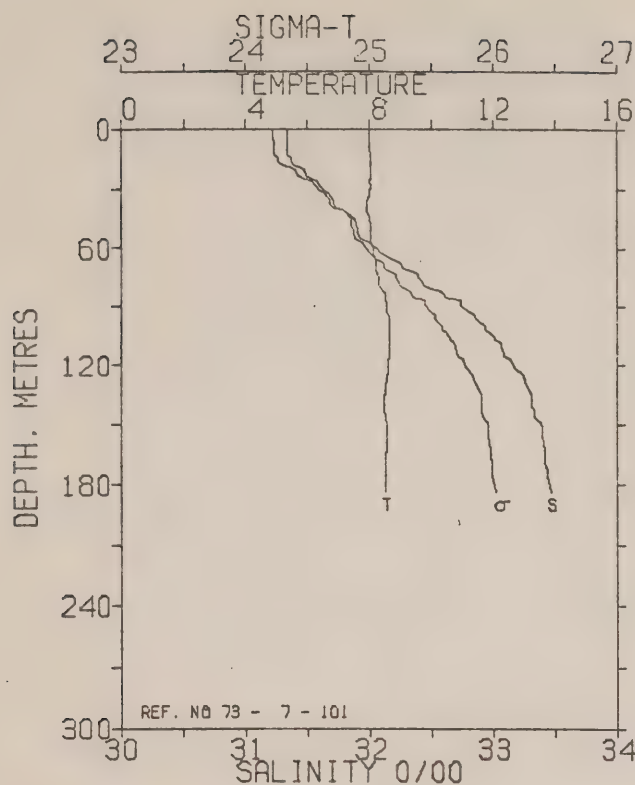
REFERENCE NO. 73-7-99 STN- JF2 DATE 15/ 3/73  
 POSITION 48-26.0N, 124-32.0W PST 3.7  
 RESULTS OF STD CAST 112 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	8.15	31.00	24.14	378.2	0.0	0.0	1478.
10	8.14	31.09	24.21	371.9	0.38	0.02	1479.
20	8.03	31.33	24.41	353.0	0.74	0.07	1479.
30	7.97	31.41	24.49	345.7	1.09	0.16	1479.
50	8.07	31.86	24.82	314.5	1.75	0.43	1480.
75	8.63	32.58	25.31	268.8	2.48	0.50	1483.
100	8.81	33.17	25.74	228.3	3.08	1.43	1485.
125	8.73	33.24	25.81	222.1	3.65	2.08	1485.
150	8.51	33.50	26.05	200.0	4.18	2.62	1485.
175	8.40	33.61	26.15	190.9	4.67	3.63	1486.
200	8.14	33.69	26.25	181.6	5.13	4.51	1485.

REFERENCE NO. 73-7-100 STN- JF3 DATE 15/ 3/73  
 POSITION 48-21.7N, 124-18.3W PST 4.8  
 RESULTS OF STD CAST 104 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	8.03	31.13	24.26	366.9	0.0	0.0	1478.
10	8.00	31.28	24.38	355.8	0.36	0.02	1478.
20	8.01	31.40	24.47	347.6	0.71	0.07	1479.
30	7.97	31.45	24.52	343.4	1.06	0.16	1479.
50	8.01	31.78	24.77	319.3	1.72	0.43	1480.
75	8.60	32.40	25.17	281.8	2.48	0.51	1483.
100	8.83	32.82	25.46	254.9	3.15	1.50	1485.
125	8.75	32.98	25.60	242.2	3.76	2.21	1485.
150	8.51	33.36	25.93	210.8	4.33	3.00	1485.
175	8.47	33.51	26.06	199.4	4.84	3.85	1486.
200	8.38	33.61	26.15	191.3	5.33	4.77	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.15	31.00	24.14	110.	8.79	33.21	25.77	0.	8.03	31.13	24.26	105.	8.85	32.87	25.50
5.	8.15	31.05	24.18	115.	8.77	33.21	25.78	5.	8.03	31.24	24.35	110.	8.78	32.93	25.56
10.	8.14	31.09	24.21	120.	8.76	33.22	25.78	10.	8.00	31.28	24.38	115.	8.78	32.96	25.58
15.	8.06	31.23	24.34	125.	8.73	33.24	25.81	15.	8.01	31.36	24.44	120.	8.77	32.97	25.59
20.	8.03	31.33	24.41	130.	8.72	33.26	25.82	20.	8.01	31.40	24.47	125.	8.75	32.98	25.60
25.	8.00	31.36	24.44	135.	8.70	33.27	25.83	25.	7.98	31.43	24.51	130.	8.72	33.01	25.63
30.	7.97	31.41	24.49	140.	8.53	33.42	25.97	30.	7.97	31.45	24.52	135.	8.65	33.12	25.73
35.	8.00	31.53	24.58	145.	8.49	33.49	26.04	35.	7.97	31.47	24.53	140.	8.55	33.22	25.81
40.	8.03	31.59	24.62	150.	8.51	33.50	26.05	40.	7.97	31.52	24.57	145.	8.53	33.29	25.88
45.	8.03	31.72	24.72	155.	8.51	33.51	26.05	45.	8.00	31.68	24.69	150.	8.51	33.26	25.93
50.	8.07	31.86	24.82	160.	8.52	33.54	26.07	50.	8.01	31.78	24.77	155.	8.51	33.37	25.95
55.	8.04	32.06	24.95	165.	8.46	33.58	26.12	55.	8.03	31.87	24.84	160.	8.48	33.42	25.99
60.	8.37	32.22	25.06	170.	8.42	33.61	26.14	60.	8.02	31.90	24.86	165.	8.47	33.43	26.00
65.	8.53	32.25	25.07	175.	8.40	33.61	26.15	65.	8.23	32.18	25.05	170.	8.47	33.47	26.03
70.	8.52	32.37	25.16	180.	8.29	33.66	26.20	70.	8.56	32.27	25.07	175.	8.47	33.51	26.06
75.	8.63	32.58	25.31	185.	8.20	33.68	26.23	75.	8.60	32.40	25.17	180.	8.44	33.55	26.09
80.	8.86	32.83	25.47	190.	8.17	33.68	26.24	80.	8.61	32.43	25.19	185.	8.40	33.58	26.13
85.	8.86	32.99	25.59	195.	8.16	33.69	26.24	85.	8.60	32.57	25.31	190.	8.39	33.60	26.14
90.	8.83	33.09	25.68	200.	8.14	33.69	26.25	90.	8.72	32.76	25.43	195.	8.39	33.61	26.15
95.	8.84	33.15	25.72	205.	8.13	33.70	26.26	95.	8.77	32.78	25.44	200.	8.38	33.61	26.15
100.	8.81	33.17	25.74	210.	8.13	33.70	26.26	100.	8.83	32.82	25.46	205.	8.38	33.61	26.15
105.	8.80	33.20	25.77	215.	8.13	33.70	26.25								



REFERENCE NO. 73- 7-101 STN- JF4 DATE 15/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 6.0  
 RESULTS OF STD CAST 89 POINTS TAKEN FROM ANALOG TRACE

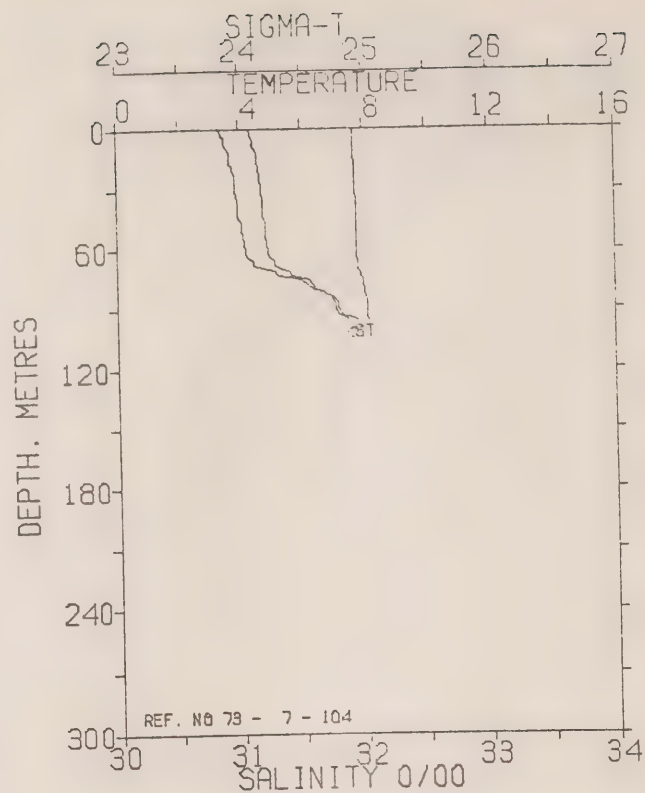
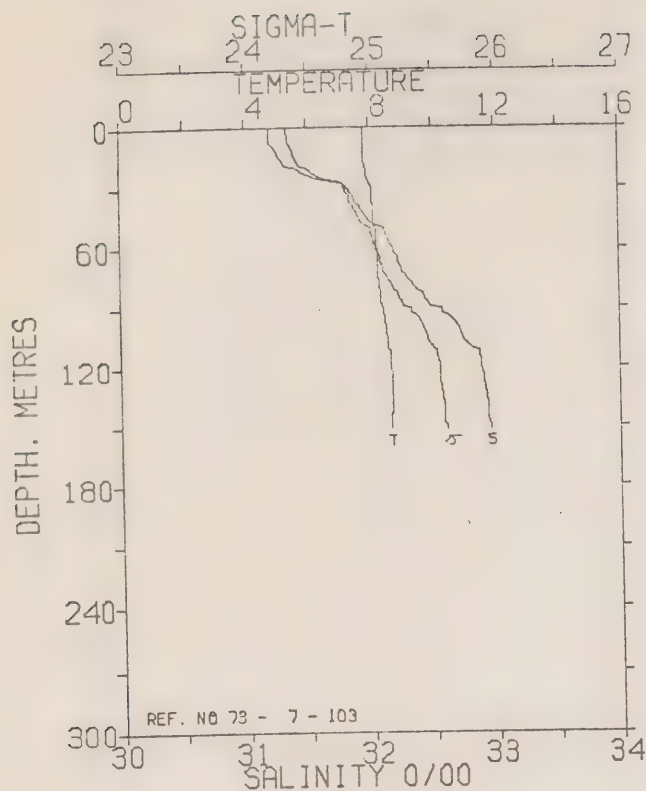
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA C	POT EN	SOUND VEL
0	8.00	31.22	24.34	355.8	0.0	0.0	1478.
10	8.01	31.23	24.34	355.7	0.36	0.02	1478.
20	8.03	31.40	24.47	347.5	0.72	0.07	1479.
30	8.01	31.59	24.62	333.3	1.06	0.16	1479.
50	8.03	31.90	24.86	310.7	1.70	0.42	1480.
75	8.28	32.39	25.21	277.9	2.44	0.89	1482.
100	8.64	32.94	25.59	242.8	3.09	1.47	1484.
125	8.53	33.24	25.84	219.6	3.67	2.13	1485.
150	8.52	33.39	25.95	208.7	4.20	2.88	1485.
175	8.50	33.43	25.99	205.4	4.72	3.74	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.00	31.22	24.34	90.	8.53	32.75	25.46
5.	8.01	31.23	24.34	95.	8.62	32.85	25.52
10.	8.01	31.23	24.34	100.	8.64	32.54	25.59
15.	8.02	31.26	24.36	105.	8.62	32.99	25.63
20.	8.03	31.40	24.47	110.	8.62	33.07	25.69
25.	8.00	31.48	24.54	115.	8.62	33.09	25.71
30.	8.01	31.59	24.62	120.	8.58	33.16	25.77
35.	7.94	31.68	24.70	125.	8.53	33.24	25.84
40.	7.93	31.71	24.73	130.	8.51	33.27	25.86
45.	8.00	31.88	24.85	135.	8.48	33.32	25.90
50.	8.03	31.90	24.86	140.	8.48	33.32	25.90
55.	8.05	31.93	24.88	145.	8.50	33.33	25.91
60.	8.10	32.07	24.98	150.	8.52	33.39	25.95
65.	8.15	32.16	25.05	155.	8.54	33.39	25.96
70.	8.21	32.26	25.12	160.	8.53	33.40	25.96
75.	8.28	32.39	25.21	165.	8.50	33.41	25.98
80.	8.33	32.47	25.26	170.	8.50	33.42	25.99
85.	8.51	32.62	25.35	175.	8.50	33.43	25.99

REFERENCE NO. 73- 7-102 STN- JF5 DATE 15/ 3/73  
 POSITION 48-16.5N, 123-49.5W PST 7.2  
 RESULTS OF STD CAST 65 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA C	POT EN	SOUND VEL
0	7.95	31.35	24.45	349.5	0.0	0.0	1478.
10	7.96	31.39	24.47	347.1	0.35	0.02	1478.
20	7.97	31.40	24.48	346.7	0.70	0.07	1478.
30	7.99	31.53	24.58	337.6	1.04	0.16	1479.
50	8.27	32.19	25.05	292.8	1.69	0.42	1481.
75	8.63	32.71	25.41	259.1	2.38	0.66	1484.
100	8.53	33.08	25.71	230.9	2.99	1.40	1484.
125	8.54	33.20	25.81	222.4	3.55	2.05	1485.
150	8.54	33.20	25.81	222.6	4.11	2.83	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.95	31.35	24.45	70.	8.67	32.64	25.34
5.	7.96	31.38	24.47	75.	8.63	32.71	25.41
10.	7.96	31.39	24.47	80.	8.58	32.77	25.46
15.	7.97	31.38	24.47	85.	8.56	32.81	25.50
20.	7.97	31.40	24.48	90.	8.51	32.87	25.55
25.	7.97	31.44	24.51	95.	8.53	33.06	25.70
30.	7.99	31.53	24.58	100.	8.53	33.08	25.71
35.	8.00	31.58	24.62	105.	8.53	33.11	25.74
40.	8.01	31.63	24.66	110.	8.53	33.14	25.76
45.	8.05	31.75	24.74	115.	8.53	33.16	25.78
50.	8.27	32.19	25.05	120.	8.54	33.20	25.80
55.	8.40	32.32	25.14	125.	8.54	33.21	25.81
60.	8.57	32.51	25.26	130.	8.54	33.21	25.81



REFERENCE NO. 73- 7-103 STN- JF6 DATE 15/ 3/73  
 POSITION 48-14.5N, 123-34.5W PST 8.3  
 RESULTS OF STD CAST 73 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.81	31.19	24.34	355.5	0.0	0.0	1477.
10	7.82	31.23	24.37	357.1	0.36	0.02	1477.
20	7.87	31.39	24.48	346.3	0.71	0.07	1478.
30	8.07	31.82	24.79	317.0	1.04	0.16	1480.
50	8.15	32.12	25.01	296.3	1.66	0.41	1481.
75	8.28	32.30	25.14	284.5	2.39	0.87	1482.
100	8.51	32.71	25.43	258.1	3.07	1.48	1483.
125	8.66	32.90	25.55	246.6	3.70	2.19	1485.
150	8.63	32.95	25.60	242.6	4.31	3.05	1485.

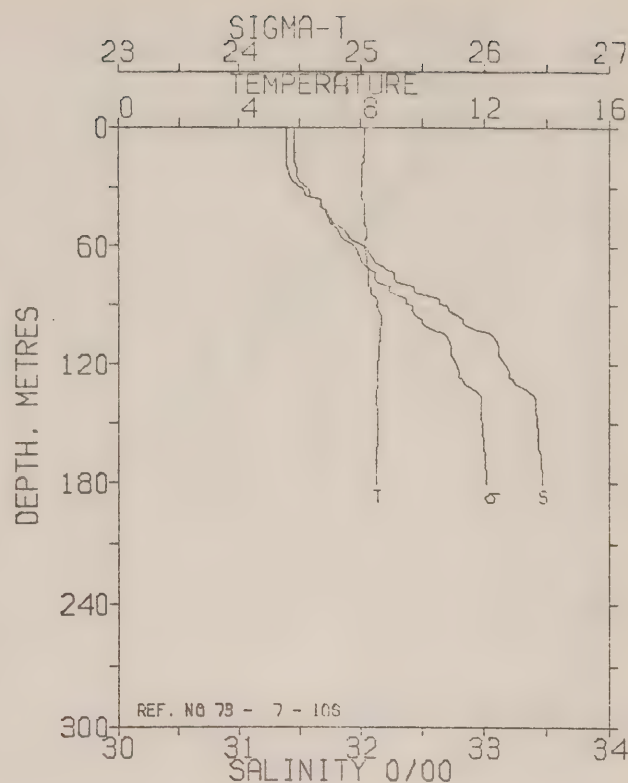
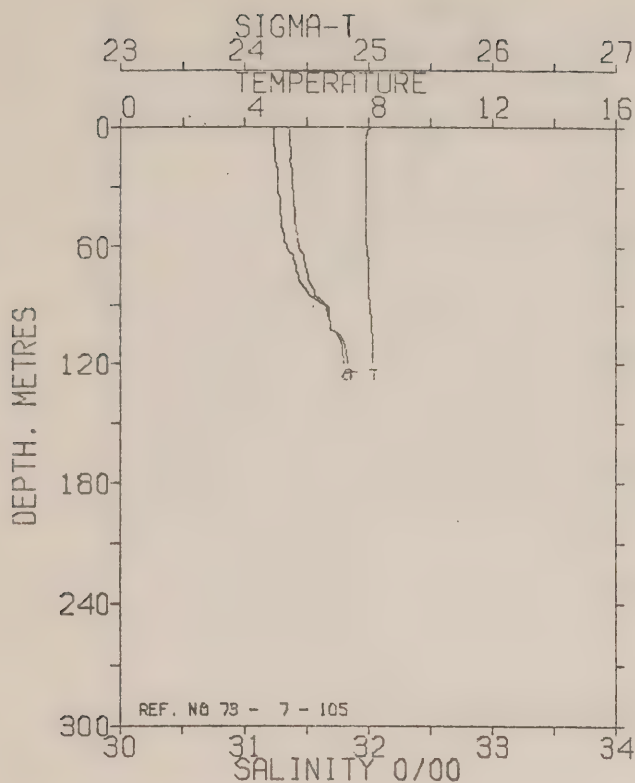
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.81	31.19	24.34	80.	8.31	32.37	25.19
5.	7.81	31.20	24.35	85.	8.35	32.43	25.23
10.	7.82	31.23	24.37	90.	8.41	32.57	25.33
15.	7.83	31.28	24.40	95.	8.46	32.65	25.39
20.	7.87	31.39	24.48	100.	8.51	32.71	25.43
25.	7.94	31.55	24.60	105.	8.54	32.74	25.45
30.	8.07	31.82	24.79	110.	8.55	32.82	25.50
35.	8.08	31.87	24.83	115.	8.64	32.87	25.54
40.	8.10	31.93	24.87	120.	8.65	32.89	25.55
45.	8.12	31.98	24.91	125.	8.66	32.90	25.55
50.	8.15	32.12	25.01	130.	8.67	32.91	25.56
55.	8.21	32.14	25.02	135.	8.67	32.93	25.57
60.	8.22	32.20	25.07	140.	8.66	32.94	25.58
65.	8.25	32.22	25.09	145.	8.64	32.93	25.58
70.	8.25	32.25	25.11	150.	8.63	32.95	25.60

REFERENCE NO. 73- 7-104 STN- JF7 DATE 15/ 3/73  
 POSITION 48-16.0N, 123-20.0W PST 9.3  
 RESULTS OF STD CAST 46 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.72	30.84	24.08	384.5	0.0	0.0	1476.
10	7.72	30.90	24.13	380.4	0.38	0.02	1477.
20	7.73	30.95	24.16	377.2	0.76	0.08	1477.
30	7.74	30.97	24.17	375.9	1.14	0.17	1477.
50	7.78	31.02	24.21	372.8	1.89	0.48	1478.
75	7.97	31.50	24.56	339.8	2.80	1.06	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.72	30.84	24.08	50.	7.78	31.02	24.21
5.	7.71	30.88	24.11	55.	7.78	31.03	24.22
10.	7.72	30.90	24.13	60.	7.78	31.04	24.22
15.	7.72	30.92	24.14	65.	7.80	31.11	24.28
20.	7.73	30.95	24.16	70.	7.84	31.22	24.36
25.	7.73	30.96	24.17	75.	7.87	31.50	24.56
30.	7.74	30.97	24.17	80.	8.03	31.60	24.63
35.	7.75	30.98	24.19	85.	8.10	31.77	24.75
40.	7.76	30.99	24.19	90.	8.12	31.81	24.78
45.	7.76	31.00	24.19	95.	8.17	31.95	24.88



REFERENCE NO. 73- 7-105 STN- JF8 DATE 15/ 3/73  
 POSITION 48-14.7N, 123- 5.4W PST 10.2  
 RESULTS OF STD CAST 47 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.04	31.23	24.34	355.6	0.0	0.0	1478.
10	7.92	31.24	24.36	358.1	0.36	0.02	1478.
20	7.92	31.26	24.37	356.8	0.72	0.07	1478.
30	7.92	31.26	24.38	356.3	1.07	0.16	1478.
50	7.92	31.30	24.41	354.2	1.78	0.45	1479.
75	7.97	31.43	24.51	345.0	2.66	1.01	1479.
100	8.08	31.69	24.69	327.7	3.50	1.76	1481.

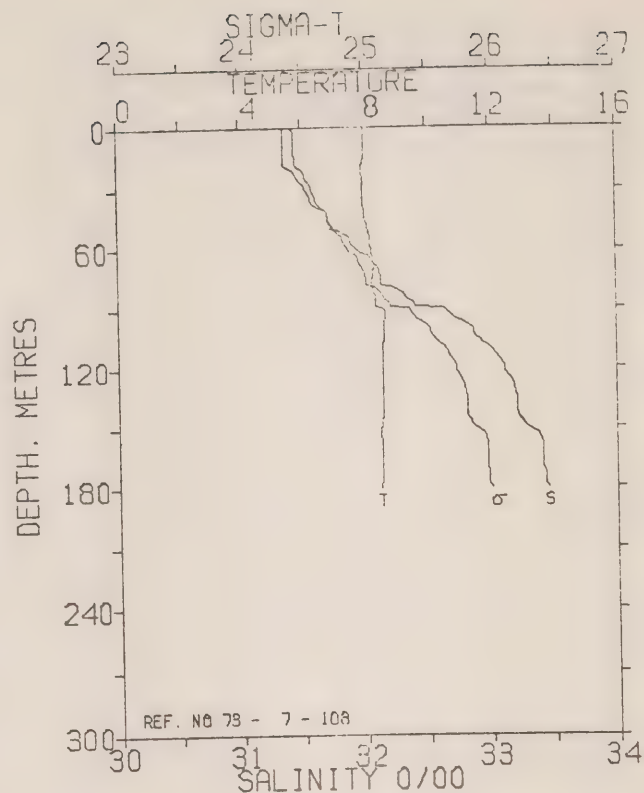
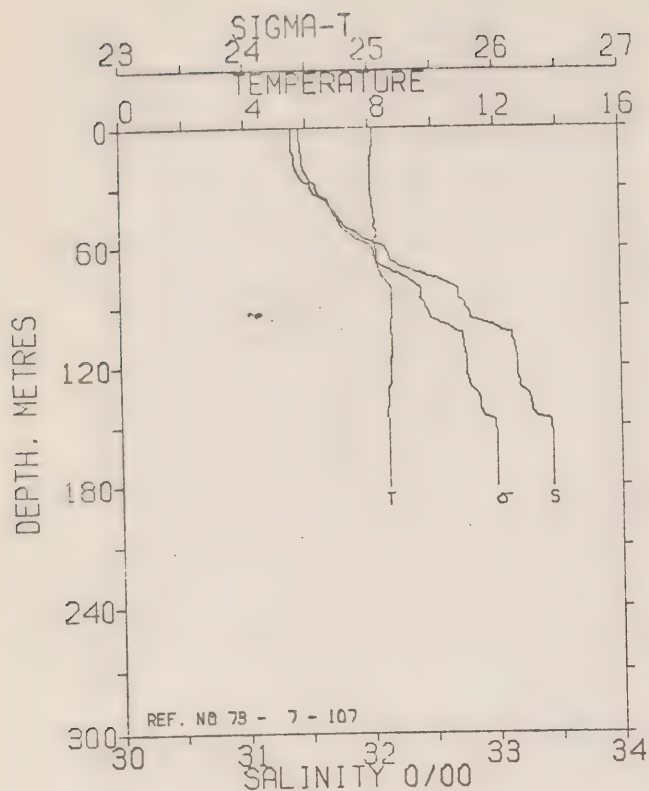
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.04	31.23	24.34	65.	7.96	31.39	24.47
5.	7.92	31.23	24.36	70.	7.96	31.40	24.48
10.	7.92	31.24	24.36	75.	7.97	31.43	24.51
15.	7.92	31.24	24.36	80.	7.99	31.47	24.53
20.	7.92	31.26	24.37	85.	8.01	31.51	24.56
25.	7.92	31.26	24.38	90.	8.05	31.64	24.66
30.	7.92	31.26	24.38	95.	8.07	31.67	24.68
35.	7.91	31.27	24.39	100.	8.08	31.69	24.69
40.	7.91	31.28	24.39	105.	8.10	31.76	24.74
45.	7.91	31.29	24.40	110.	8.11	31.80	24.78
50.	7.92	31.30	24.41	115.	8.12	31.82	24.79
55.	7.93	31.32	24.42	120.	8.13	31.83	24.79

REFERENCE NO. 73- 7-106 STN- JF4 DATE 15/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 15.2  
 RESULTS OF STD CAST 88 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.13	31.39	24.45	348.9	0.0	0.0	1479.
10	8.10	31.39	24.46	348.9	0.35	0.02	1479.
20	8.04	31.40	24.47	347.6	0.70	0.07	1479.
30	8.03	31.51	24.56	339.1	1.04	0.16	1479.
50	8.17	31.83	24.78	318.2	1.70	0.43	1480.
75	8.26	32.27	25.12	286.5	2.46	0.91	1482.
100	8.66	32.86	25.52	249.4	3.12	1.50	1484.
125	8.55	33.20	25.80	222.9	3.70	2.16	1485.
150	8.52	33.43	25.99	205.8	4.22	2.89	1485.
175	8.50	33.46	26.02	203.2	4.73	3.74	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.13	31.39	24.45	90.	8.52	32.70	25.42
5.	8.12	31.39	24.45	95.	8.70	32.79	25.46
10.	8.10	31.39	24.46	100.	8.66	32.86	25.52
15.	8.09	31.39	24.46	105.	8.61	33.06	25.68
20.	8.04	31.40	24.47	110.	8.59	33.11	25.73
25.	8.06	31.42	24.48	115.	8.59	33.12	25.73
30.	8.03	31.51	24.56	120.	8.57	33.17	25.78
35.	8.04	31.60	24.63	125.	8.55	33.20	25.80
40.	8.11	31.67	24.67	130.	8.54	33.26	25.85
45.	8.11	31.74	24.72	135.	8.51	33.38	25.95
50.	8.17	31.83	24.78	140.	8.51	33.42	25.98
55.	8.19	31.50	24.84	145.	8.52	33.42	25.98
60.	8.12	32.05	24.96	150.	8.52	33.43	25.99
65.	8.17	32.09	24.99	155.	8.52	33.43	25.99
70.	8.21	32.16	25.04	160.	8.51	33.44	26.00
75.	8.26	32.27	25.12	165.	8.50	33.45	26.00
80.	8.28	32.43	25.24	170.	8.50	33.46	26.01
85.	8.42	32.55	25.32	175.	8.50	33.46	26.02





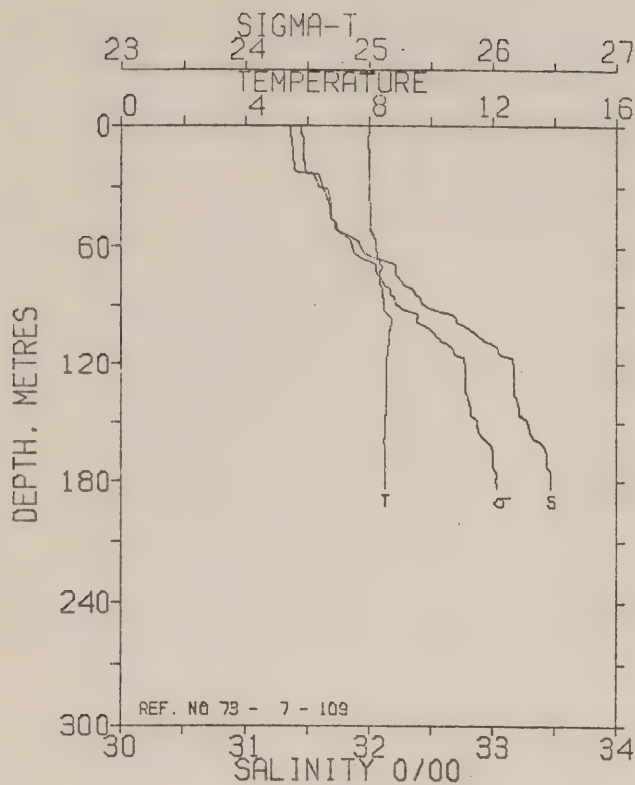
REFERENCE NO. 73- 7-107 STN- JF4 DATE 15/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 16.1  
 RESULTS OF STD CAST 82 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.12	31.38	24.45	349.5	0.0	0.0	1479.
10	8.08	31.38	24.45	349.5	0.35	0.02	1479.
20	8.06	31.41	24.48	347.1	0.70	0.07	1479.
30	8.06	31.54	24.57	337.9	1.04	0.16	1479.
50	8.14	31.82	24.78	318.4	1.70	0.42	1480.
75	8.40	32.52	25.30	270.0	2.44	0.89	1482.
100	8.61	33.00	25.64	237.9	3.08	1.47	1484.
125	8.61	33.18	25.78	225.2	3.65	2.12	1485.
150	8.52	33.43	25.99	205.4	4.19	2.88	1485.
175	8.53	33.45	26.00	204.8	4.70	3.73	1486.

REFERENCE NO. 73- 7-108 STN- JF4 DATE 15/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 17.2  
 RESULTS OF STD CAST 90 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA C	POT EN	SOUND VEL
0	8.04	31.35	24.43	350.6	0.0	0.0	1478.
10	8.02	31.36	24.44	350.1	0.35	0.02	1478.
20	7.95	31.41	24.49	345.7	0.70	0.07	1478.
30	7.97	31.53	24.58	337.2	1.04	0.16	1479.
50	8.13	31.76	24.74	322.8	1.70	0.43	1480.
75	8.25	32.14	25.02	296.1	2.47	0.91	1481.
100	8.63	32.87	25.53	247.9	3.15	1.52	1484.
125	8.58	33.16	25.77	226.3	3.74	2.20	1485.
150	8.51	33.29	25.88	215.6	4.30	2.98	1485.
175	8.52	33.43	25.99	206.1	4.82	3.84	1486.

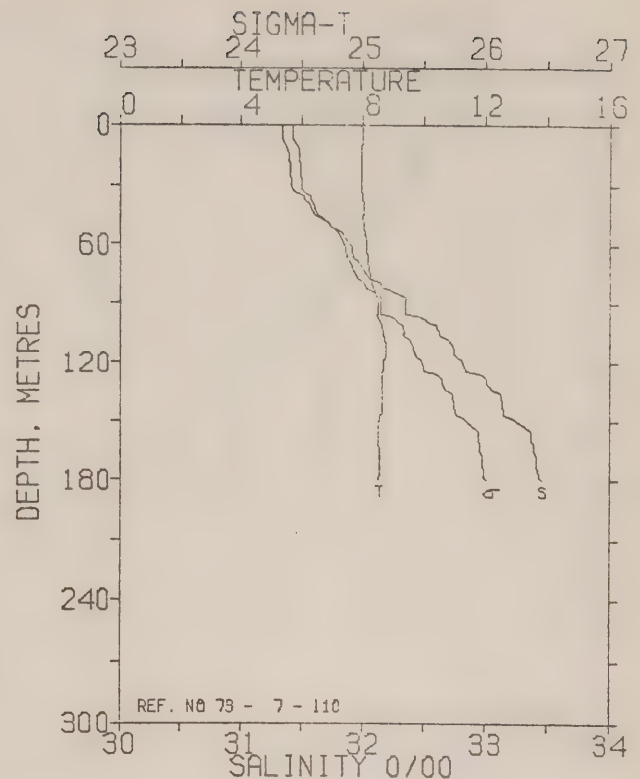
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.12	31.38	24.45	80.	8.67	32.70	25.40	0.	8.04	31.35	24.43	95.	8.67	32.73	25.42
5.	8.09	31.38	24.45	85.	8.68	32.70	25.39	5.	8.04	31.36	24.44	100.	8.63	32.87	25.53
10.	8.09	31.36	24.43	90.	8.68	32.75	25.43	10.	8.02	31.36	24.44	105.	8.62	32.90	25.56
15.	8.06	31.40	24.47	95.	8.66	32.80	25.47	15.	7.98	31.36	24.45	110.	8.59	33.00	25.64
20.	8.06	31.41	24.48	100.	8.61	33.00	25.64	20.	7.95	31.41	24.49	115.	8.58	33.06	25.69
25.	8.04	31.46	24.51	105.	8.66	33.13	25.73	25.	7.97	31.47	24.54	120.	8.58	33.12	25.73
30.	8.06	31.54	24.57	110.	8.67	33.15	25.75	30.	7.97	31.53	24.58	125.	8.58	33.16	25.77
35.	8.07	31.62	24.64	115.	8.65	33.17	25.76	35.	7.98	31.57	24.61	130.	8.58	33.20	25.80
40.	8.10	31.69	24.69	120.	8.64	33.17	25.76	40.	8.03	31.65	24.67	135.	8.58	33.22	25.81
45.	8.13	31.75	24.73	125.	8.61	33.18	25.78	45.	8.07	31.72	24.71	140.	8.58	33.22	25.81
50.	8.14	31.82	24.78	130.	8.57	33.20	25.80	50.	8.13	31.76	24.74	145.	8.57	33.23	25.83
55.	8.15	31.95	24.88	135.	8.53	33.27	25.86	55.	8.20	31.89	24.83	150.	8.51	33.29	25.88
60.	8.18	32.12	25.02	140.	8.51	33.29	25.88	60.	8.23	31.94	24.87	155.	8.52	33.40	25.96
65.	8.20	32.15	25.03	145.	8.51	33.33	25.91	65.	8.31	32.06	24.95	160.	8.52	33.42	25.98
70.	8.26	32.26	25.11	150.	8.52	33.43	25.99	70.	8.30	32.11	24.99	165.	8.52	33.42	25.98
75.	8.40	32.52	25.30	155.	8.52	33.44	26.00	75.	8.25	32.14	25.02	170.	8.52	33.42	25.98
								80.	8.30	32.25	25.10	175.	8.52	33.43	25.99
								85.	8.37	32.35	25.16	180.	8.50	33.45	26.01



REFERENCE NO. 73- 7-109 STN- JF4 DATE 15/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 18.0  
 RESULTS OF STD CAST 94 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.99	31.35	24.44	345.9	0.0	0.0	1478.
10	7.96	31.37	24.46	348.6	0.35	0.02	1478.
20	7.97	31.39	24.47	347.4	0.70	0.07	1478.
30	8.01	31.58	24.61	334.0	1.04	0.16	1479.
50	8.06	31.73	24.72	324.0	1.69	0.42	1480.
75	8.33	32.23	25.08	290.5	2.46	0.91	1482.
100	8.69	32.76	25.44	256.9	3.15	1.52	1484.
125	8.56	33.17	25.78	225.2	3.74	2.20	1485.
150	8.50	33.27	25.87	216.9	4.30	2.58	1485.
175	8.49	33.47	26.02	203.0	4.82	3.85	1486.

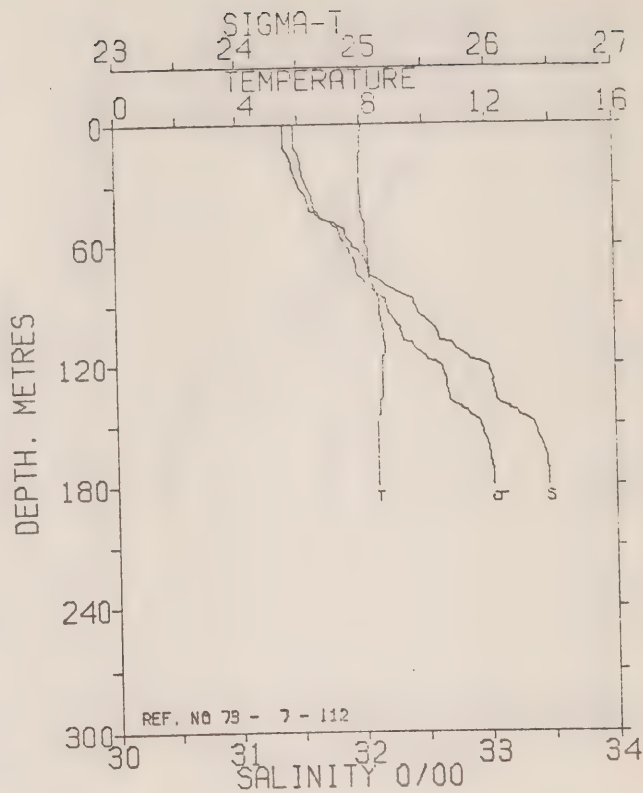
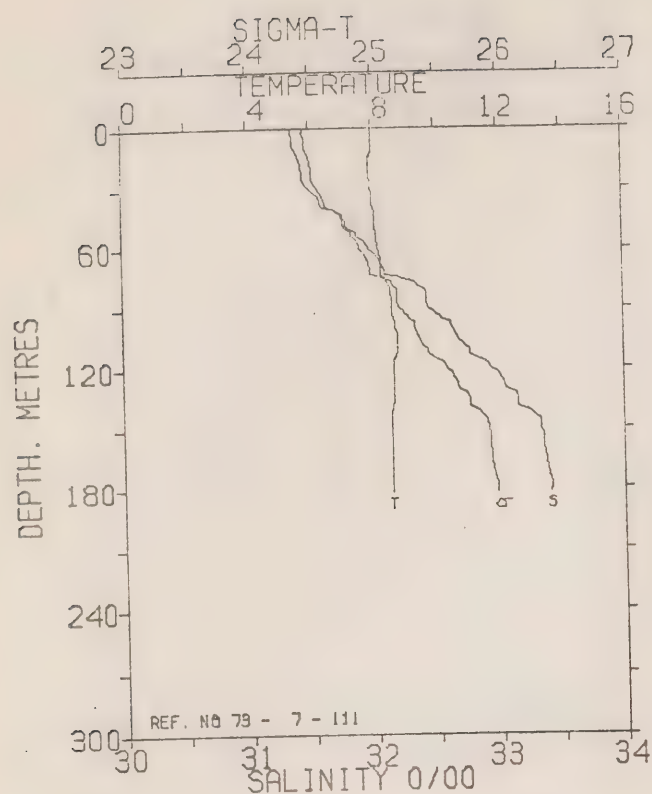
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.99	31.35	24.44	95.	8.66	32.69	25.39
5.	7.96	31.36	24.45	100.	8.69	32.76	25.44
10.	7.96	31.37	24.46	105.	8.63	32.87	25.53
15.	7.97	31.38	24.47	110.	8.63	33.00	25.63
20.	7.97	31.39	24.47	115.	8.59	33.07	25.69
25.	7.99	31.55	24.59	120.	8.56	33.16	25.77
30.	8.01	31.58	24.61	125.	8.56	33.17	25.78
35.	8.01	31.65	24.67	130.	8.57	33.15	25.76
40.	8.02	31.67	24.69	135.	8.55	33.17	25.78
45.	8.03	31.68	24.69	140.	8.53	33.20	25.81
50.	8.06	31.73	24.72	145.	8.52	33.21	25.82
55.	8.13	31.85	24.81	150.	8.50	33.29	25.88
60.	8.21	31.93	24.86	155.	8.45	33.28	25.95
65.	8.26	32.02	24.93	160.	8.50	33.44	26.00
70.	8.39	32.20	25.05	165.	8.49	33.47	26.02
75.	8.33	32.23	25.08	170.	8.49	33.47	26.02
80.	8.37	32.31	25.14	175.	8.49	33.47	26.02
85.	8.42	32.40	25.20	180.	8.49	33.47	26.02



REFERENCE NO. 73- 7-110 STN- JF4 DATE 15/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 19.0  
 RESULTS OF STD CAST 84 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.96	31.33	24.43	351.0	0.0	0.0	1478.
10	7.96	31.36	24.45	349.1	0.35	0.02	1478.
20	7.94	31.40	24.48	346.2	0.70	0.07	1478.
30	7.95	31.41	24.49	345.9	1.04	0.16	1479.
50	8.04	31.73	24.73	323.7	1.72	0.43	1480.
75	8.23	32.03	24.94	303.9	2.50	0.93	1481.
100	8.58	32.56	25.30	270.2	3.22	1.57	1484.
125	8.64	32.91	25.56	245.8	3.86	2.31	1485.
150	8.51	33.26	25.86	218.1	4.44	3.12	1485.
175	8.52	33.43	25.99	206.2	4.97	3.99	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.96	31.33	24.43	95.	8.49	32.35	25.15
5.	7.96	31.33	24.43	100.	8.58	32.56	25.30
10.	7.96	31.36	24.45	105.	8.70	32.63	25.33
15.	7.94	31.29	24.48	110.	8.74	32.72	25.40
20.	7.94	31.40	24.48	115.	8.74	32.74	25.42
25.	7.94	31.40	24.48	120.	8.67	32.81	25.48
30.	7.95	31.41	24.49	125.	8.64	32.91	25.56
35.	7.99	31.52	24.57	130.	8.63	33.02	25.65
40.	8.02	31.56	24.60	135.	8.62	33.12	25.73
45.	8.01	31.60	24.63	140.	8.61	33.13	25.74
50.	8.04	31.73	24.73	145.	8.60	33.14	25.75
55.	8.08	31.84	24.81	150.	8.51	33.26	25.86
60.	8.12	31.90	24.85	155.	8.51	33.37	25.94
65.	8.15	31.92	24.86	160.	8.51	33.37	25.94
70.	8.19	31.98	24.90	165.	8.52	33.39	25.96
75.	8.23	32.03	24.94	170.	8.52	33.41	25.97
80.	8.31	32.15	25.02	175.	8.52	33.43	25.99
85.	8.44	32.29	25.11	180.	8.51	33.45	26.01



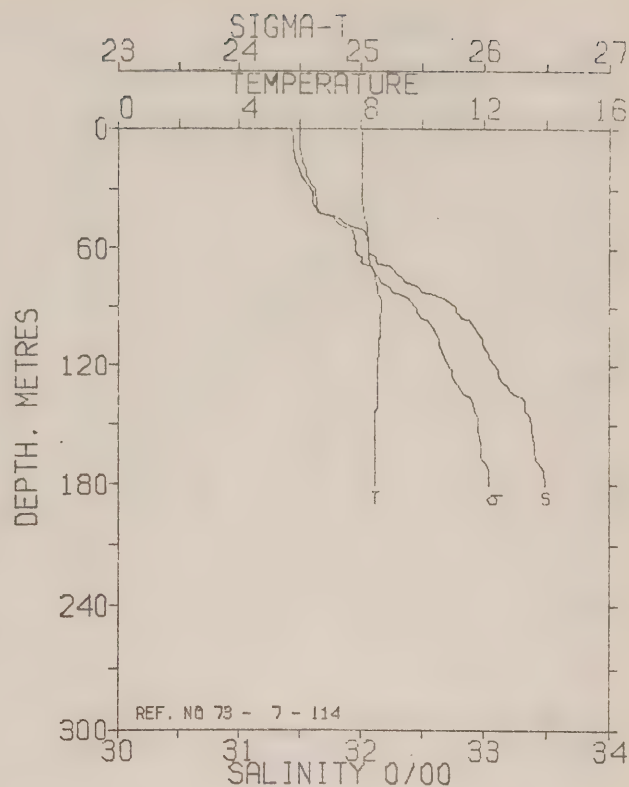
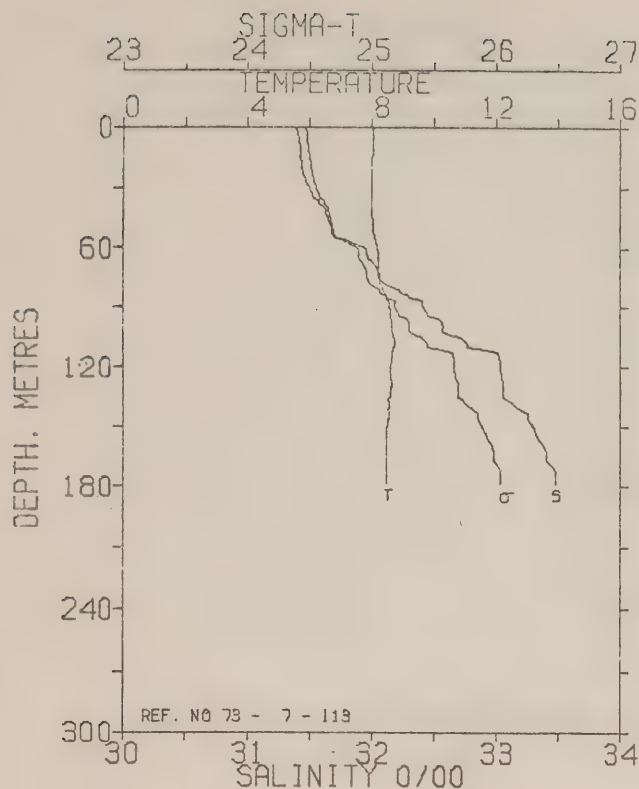
REFERENCE NO. 73-7-111 STN- JF4 DATE 15/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 20.0  
 RESULTS OF STD CAST 92 POINTS TAKEN FROM ANALOG TRACE

REFERENCE NO. 73-7-112 STN- JF4 DATE 15/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 21.0  
 RESULTS OF STD CAST 92 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL	DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EA	SOUND VEL
0	7.98	31.36	24.45	349.1	0.0	0.0	1478.	0	8.02	31.38	24.46	348.2	0.0	0.0	1478.
10	7.96	31.38	24.47	347.6	0.35	0.02	1478.	10	8.00	31.38	24.46	348.4	0.35	0.02	1478.
20	7.93	31.44	24.51	342.5	0.69	0.07	1478.	20	7.94	31.44	24.52	343.1	0.69	0.07	1478.
30	7.95	31.49	24.56	339.5	1.04	0.16	1479.	30	7.94	31.49	24.56	339.5	1.04	0.16	1479.
50	8.09	31.80	24.77	319.2	1.69	0.42	1480.	50	8.12	31.80	24.77	319.7	1.70	0.43	1480.
75	8.36	32.24	25.08	290.2	2.46	0.91	1482.	75	8.24	32.07	24.97	301.1	2.47	0.92	1481.
100	8.70	32.63	25.34	266.7	3.15	1.53	1484.	100	8.62	32.55	25.28	271.7	3.18	1.55	1484.
125	8.62	33.02	25.65	237.3	3.78	2.25	1485.	125	8.63	33.02	25.65	237.4	3.82	2.28	1485.
150	8.53	33.33	25.91	212.9	4.35	3.04	1485.	150	8.49	33.36	25.94	210.2	4.39	3.08	1485.
175	8.52	33.40	25.96	208.2	4.87	3.91	1486.	175	8.48	33.47	26.03	202.3	4.91	3.93	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.98	31.36	24.45	95.	8.63	32.55	25.28	0.	8.02	31.38	24.46	90.	8.56	32.42	25.19
5.	7.97	31.37	24.46	100.	8.70	32.63	25.34	5.	8.01	31.38	24.46	95.	8.57	32.46	25.22
10.	7.96	31.38	24.47	105.	8.75	32.67	25.36	10.	8.00	31.38	24.46	100.	8.62	32.55	25.28
15.	7.93	31.42	24.50	110.	8.78	32.77	25.43	15.	7.95	31.42	24.50	105.	8.67	32.60	25.32
20.	7.93	31.44	24.51	115.	8.65	32.85	25.51	20.	7.94	31.44	24.52	110.	8.72	32.72	25.40
25.	7.93	31.44	24.52	120.	8.62	32.93	25.58	25.	7.94	31.46	24.53	115.	8.66	32.82	25.49
30.	7.95	31.49	24.56	125.	8.62	33.02	25.65	30.	7.94	31.49	24.56	120.	8.63	32.87	25.61
35.	7.99	31.57	24.61	130.	8.63	33.06	25.68	35.	7.96	31.55	24.60	125.	8.63	33.02	25.65
40.	8.02	31.61	24.64	135.	8.60	33.16	25.76	40.	7.98	31.58	24.62	130.	8.62	33.04	25.67
45.	8.08	31.77	24.75	140.	8.56	33.20	25.80	45.	8.02	31.64	24.66	135.	8.61	33.06	25.69
50.	8.09	31.80	24.77	145.	8.52	33.32	25.90	50.	8.12	31.80	24.77	140.	8.53	33.13	25.75
55.	8.14	31.92	24.86	150.	8.53	33.35	25.93	55.	8.13	31.88	24.83	145.	8.51	33.24	25.84
60.	8.17	31.97	24.89	155.	8.53	33.36	25.93	60.	8.15	31.93	24.87	150.	8.49	33.36	25.94
65.	8.24	32.05	24.95	160.	8.53	33.37	25.94	65.	8.18	32.00	24.92	155.	8.48	33.39	25.96
70.	8.26	32.08	24.97	165.	8.53	33.38	25.95	70.	8.22	32.05	24.95	160.	8.48	33.43	25.99
75.	8.36	32.24	25.08	170.	8.52	33.38	25.96	75.	8.24	32.07	24.97	165.	8.48	33.45	26.01
80.	8.56	32.41	25.19	175.	8.52	33.40	25.96	80.	8.36	32.19	25.04	170.	8.48	33.46	26.02
85.	8.57	32.42	25.19	180.	8.53	33.41	25.97	85.	8.47	32.34	25.14	175.	8.48	33.47	26.03



REFERENCE NO. 73-7-113 STN- JF4 DATE 15/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 22.0  
 RESULTS OF STD CAST 93 POINTS TAKEN FROM ANALOG TRACE

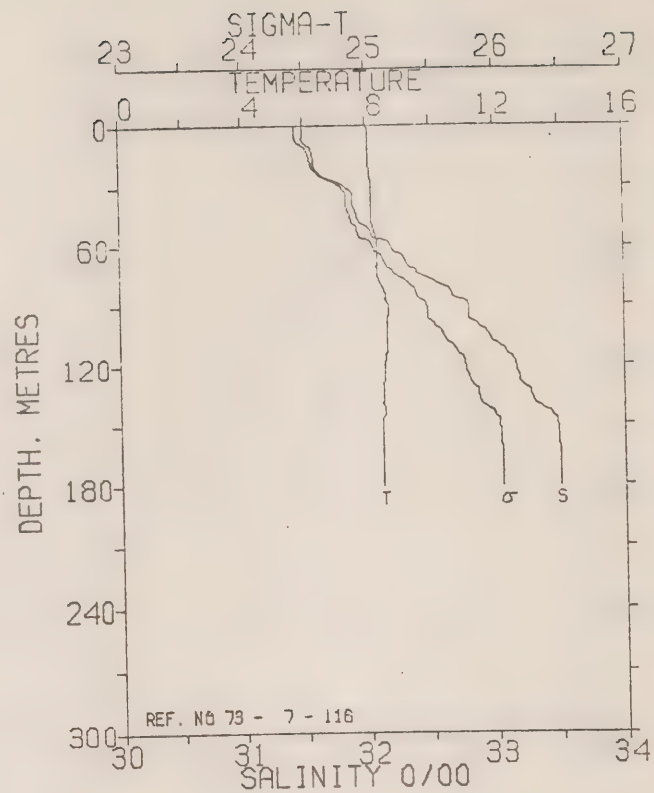
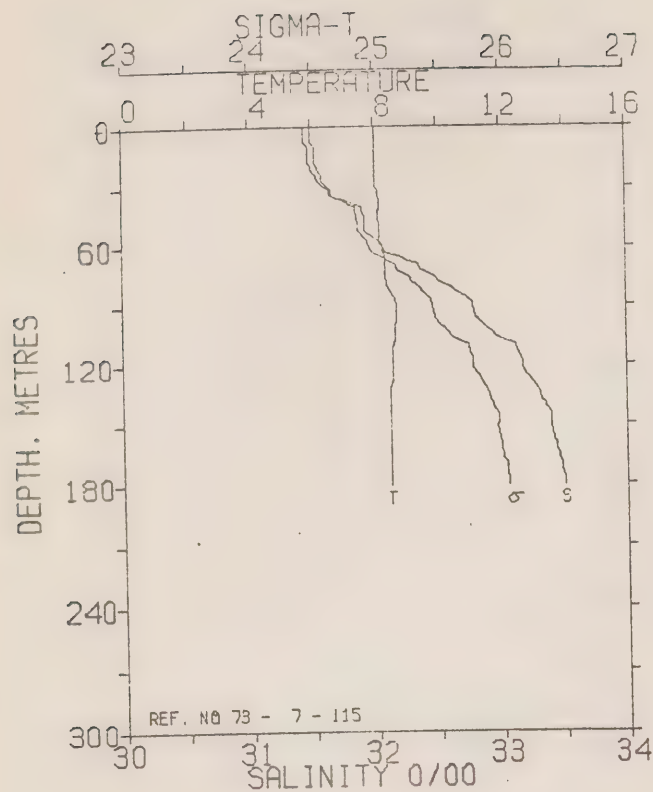
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA II	POT EN	SOUND VEL
0	8.05	31.39	24.46	347.8	0.0	0.0	1478.
10	8.05	31.42	24.49	346.0	0.35	0.02	1479.
20	7.97	31.43	24.50	344.4	0.69	0.07	1478.
30	7.96	31.50	24.56	339.5	1.03	0.16	1479.
50	8.05	31.67	24.68	328.0	1.70	0.43	1480.
75	8.23	32.05	24.95	302.5	2.48	0.92	1481.
100	8.63	32.57	25.30	270.2	3.19	1.56	1484.
125	8.60	33.04	25.67	235.0	3.81	2.27	1485.
150	8.49	33.29	25.89	215.3	4.38	3.06	1485.
175	8.47	33.48	26.03	201.6	4.90	3.92	1486.

REFERENCE NO. 73-7-114 STN- JF4 DATE 15/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 23.0  
 RESULTS OF STD CAST 83 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA II	POT EN	SOUND VEL
0	8.05	31.43	24.49	344.8	0.0	0.0	1478.
10	8.05	31.44	24.50	344.4	0.34	0.02	1479.
20	8.03	31.49	24.54	340.7	0.69	0.07	1479.
30	8.05	31.59	24.62	333.7	1.03	0.16	1479.
50	8.21	32.00	24.91	306.0	1.68	0.42	1481.
75	8.46	32.34	25.15	284.2	2.42	0.89	1482.
100	8.61	32.93	25.58	243.4	3.08	1.48	1484.
125	8.56	33.12	25.74	228.9	3.67	2.15	1485.
150	8.47	33.38	25.96	208.6	4.21	2.51	1485.
175	8.45	33.48	26.04	201.3	4.72	3.76	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.05	31.39	24.46	90.	8.56	32.41	25.19	0.	8.05	31.43	24.49	95.	8.64	32.81	25.49
5.	8.05	31.41	24.48	95.	8.58	32.53	25.28	5.	8.05	31.44	24.50	100.	8.61	32.93	25.58
10.	8.05	31.42	24.49	100.	8.63	32.57	25.30	10.	8.05	31.44	24.50	105.	8.60	32.58	25.62
15.	8.00	31.42	24.49	105.	8.70	32.71	25.40	15.	8.04	31.45	24.51	110.	8.59	33.00	25.64
20.	7.97	31.43	24.50	110.	8.70	32.77	25.44	20.	8.03	31.49	24.54	115.	8.58	33.05	25.68
25.	7.97	31.46	24.53	115.	8.61	33.02	25.65	25.	8.05	31.53	24.57	120.	8.56	33.10	25.72
30.	7.96	31.50	24.56	120.	8.60	33.03	25.66	30.	8.05	31.59	24.62	125.	8.56	33.12	25.74
35.	7.96	31.53	24.58	125.	8.60	33.04	25.67	35.	8.06	31.60	24.63	130.	8.55	33.20	25.80
40.	7.99	31.61	24.64	130.	8.58	33.06	25.69	40.	8.08	31.63	24.65	135.	8.53	33.28	25.87
45.	8.02	31.64	24.66	135.	8.54	33.06	25.69	45.	8.16	31.82	24.79	140.	8.51	33.34	25.91
50.	8.05	31.67	24.68	140.	8.52	33.17	25.79	50.	8.21	32.00	24.91	145.	8.47	33.36	25.94
55.	8.09	31.72	24.71	145.	8.52	33.25	25.85	55.	8.23	32.05	24.95	150.	8.47	33.38	25.96
60.	8.17	31.96	24.89	150.	8.49	33.29	25.89	60.	8.24	32.07	24.96	155.	8.47	33.39	25.96
65.	8.18	31.96	24.89	155.	8.47	33.33	25.92	65.	8.27	32.12	25.00	160.	8.46	33.40	25.97
70.	8.21	32.03	24.94	160.	8.47	33.38	25.96	70.	8.38	32.25	25.08	165.	8.46	33.41	25.98
75.	8.23	32.05	24.95	165.	8.47	33.40	25.97	75.	8.46	32.34	25.15	170.	8.45	33.45	26.01
80.	8.33	32.17	25.03	170.	8.47	33.46	26.02	80.	8.55	32.48	25.24	175.	8.45	33.48	26.04
85.	8.45	32.30	25.12	175.	8.47	33.48	26.03	85.	8.65	32.68	25.38	180.	8.46	33.49	26.04





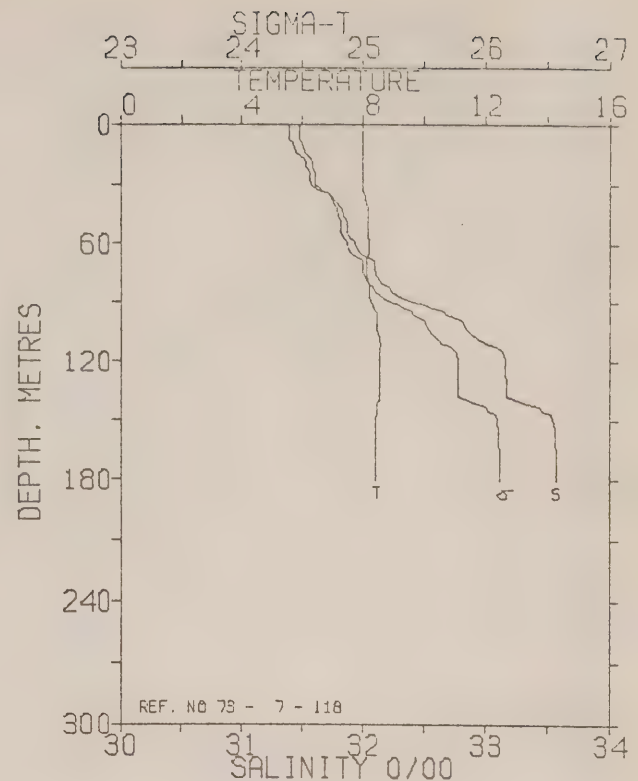
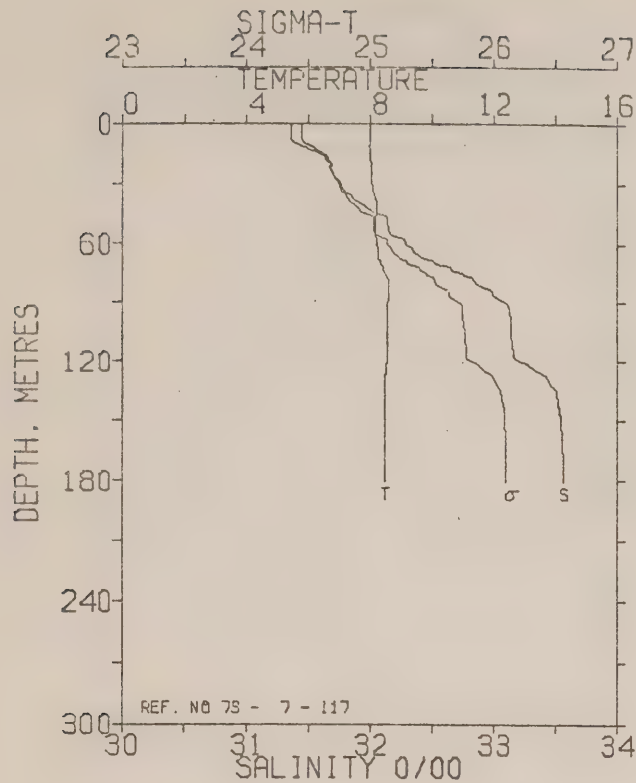
REFERENCE NO. 73-7-115 STN- JF4 DATE 16/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 0.1  
 RESULTS OF STD CAST 87 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.05	31.44	24.50	344.1	0.0	0.0	1478.
10	8.06	31.47	24.52	342.5	0.34	0.02	1479.
20	8.02	31.50	24.55	339.9	0.69	0.07	1479.
30	8.06	31.61	24.63	332.5	1.02	0.16	1479.
50	8.15	31.92	24.86	310.5	1.66	0.41	1480.
75	8.34	32.48	25.27	272.0	2.40	0.88	1482.
100	8.65	32.87	25.53	248.2	3.04	1.46	1484.
125	8.53	33.21	25.81	221.9	3.62	2.12	1485.
150	8.45	33.39	25.97	207.2	4.15	2.66	1485.
175	8.45	33.49	26.05	200.3	4.66	3.71	1486.

REFERENCE NO. 73-7-116 STN- JF4 DATE 16/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 1.1  
 RESULTS OF STD CAST 78 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.06	31.43	24.49	344.9	0.0	0.0	1479.
10	8.07	31.49	24.53	341.5	0.34	0.02	1479.
20	8.09	31.56	24.59	336.3	0.68	0.07	1479.
30	8.15	31.83	24.79	317.3	1.01	0.15	1480.
50	8.21	32.01	24.92	305.3	1.64	0.41	1481.
75	8.32	32.45	25.25	274.4	2.36	0.87	1482.
100	8.62	32.87	25.54	247.7	3.01	1.45	1484.
125	8.53	33.19	25.80	223.3	3.59	2.11	1485.
150	8.49	33.48	26.03	201.3	4.13	2.86	1485.
175	8.47	33.50	26.05	200.1	4.63	3.69	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.05	31.44	24.50	95.	8.67	32.80	25.47	0.	8.06	31.43	24.49	90.	8.66	32.79	25.47
5.	8.05	31.44	24.50	100.	8.65	32.67	25.53	5.	8.08	31.43	24.49	95.	8.63	32.80	25.48
10.	8.06	31.47	24.52	105.	8.62	32.95	25.60	10.	8.07	31.49	24.53	100.	8.62	32.87	25.54
15.	8.06	31.48	24.53	110.	8.57	33.12	25.74	15.	8.08	31.55	24.58	105.	8.62	32.56	25.60
20.	8.02	31.50	24.55	115.	8.55	33.15	25.76	20.	8.09	31.56	24.59	110.	8.62	33.04	25.67
25.	8.06	31.54	24.58	120.	8.55	33.17	25.78	25.	8.14	31.64	24.64	115.	8.58	33.14	25.77
30.	8.06	31.61	24.62	125.	8.53	33.21	25.81	30.	8.15	31.83	24.79	120.	8.55	33.16	25.77
35.	8.13	31.68	24.68	130.	8.50	33.27	25.86	35.	8.15	31.89	24.84	125.	8.53	33.19	25.80
40.	8.15	31.90	24.84	135.	8.47	33.31	25.90	40.	8.15	31.89	24.84	130.	8.51	33.22	25.83
45.	8.14	31.92	24.86	140.	8.46	33.35	25.93	45.	8.16	31.93	24.87	135.	8.50	33.28	25.88
50.	8.15	31.92	24.86	145.	8.45	33.39	25.97	50.	8.21	32.01	24.92	140.	8.51	33.34	25.91
55.	8.17	31.98	24.90	150.	8.45	33.39	25.97	55.	8.28	32.05	24.94	145.	8.52	33.44	26.00
60.	8.25	32.06	24.95	155.	8.45	33.40	25.98	60.	8.33	32.19	25.04	150.	8.49	33.48	26.03
65.	8.32	32.22	25.07	160.	8.45	33.43	26.00	65.	8.32	32.28	25.12	155.	8.49	33.49	26.04
70.	8.34	32.34	25.16	165.	8.45	33.45	26.02	70.	8.31	32.32	25.15	160.	8.48	33.49	26.04
75.	8.34	32.48	25.27	170.	8.45	33.48	26.04	75.	8.32	32.45	25.25	165.	8.47	33.50	26.05
80.	8.40	32.59	25.35	175.	8.45	33.49	26.05	80.	8.45	32.59	25.34	170.	8.47	33.50	26.05
85.	8.58	32.72	25.43	180.	8.46	33.50	26.05								



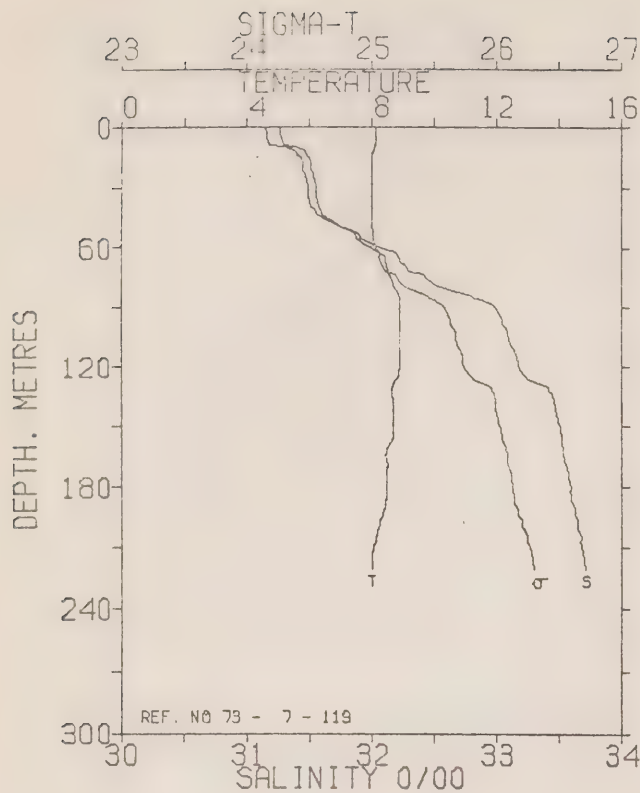
REFERENCE NO. 73- 7-117 STN- JF4 DATE 16/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 2-2  
 RESULTS OF STD CAST 70 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.99	31.35	24.44	349.9	0.0	0.0	1478.
10	7.97	31.40	24.48	346.5	0.35	0.02	1478.
20	8.02	31.67	24.68	327.3	0.68	0.07	1479.
30	8.06	31.76	24.75	321.3	1.01	0.15	1479.
50	8.17	32.14	25.03	295.0	1.63	0.40	1481.
75	8.46	32.74	25.46	254.5	2.33	0.85	1483.
100	8.54	33.13	25.75	227.1	2.92	1.37	1484.
125	8.50	33.34	25.92	211.7	3.48	2.02	1485.
150	8.46	33.54	26.08	196.4	3.98	2.72	1485.
175	8.45	33.56	26.10	195.5	4.47	3.53	1486.

REFERENCE NO. 73- 7-118 STN- JF4 DATE 16/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 3-2  
 RESULTS OF STD CAST 79 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	7.99	31.39	24.47	347.0	0.0	0.0	1478.
10	7.97	31.42	24.50	344.6	0.35	0.02	1478.
20	7.97	31.53	24.58	337.0	0.65	0.07	1479.
30	7.99	31.57	24.61	334.5	1.02	0.16	1479.
50	8.16	31.87	24.82	315.1	1.67	0.42	1480.
75	8.14	32.10	25.00	297.8	2.43	0.81	1481.
100	8.49	32.81	25.51	250.3	3.13	1.52	1484.
125	8.54	33.16	25.77	225.4	3.72	2.19	1485.
150	8.43	33.55	26.09	195.5	4.26	2.55	1485.
175	8.43	33.57	26.11	194.3	4.74	3.75	1486.

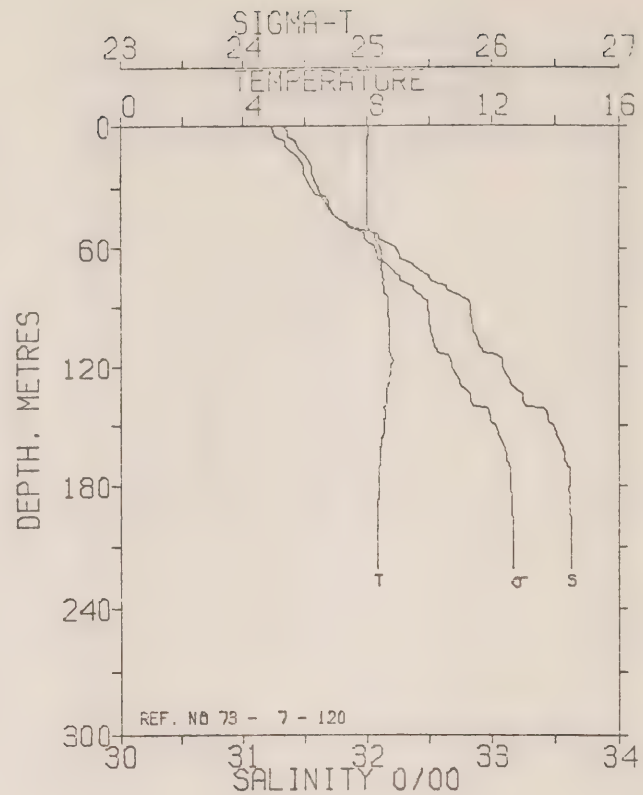
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.99	31.35	24.44	80.	8.58	32.85	25.53	0.	7.99	31.39	24.47	90.	8.28	32.40	25.22
5.	7.99	31.36	24.45	85.	8.59	32.99	25.63	5.	7.99	31.39	24.47	95.	8.45	32.67	25.40
10.	7.97	31.40	24.48	90.	8.56	33.09	25.72	10.	7.97	31.42	24.50	100.	8.49	32.81	25.51
15.	8.00	31.59	24.63	95.	8.55	33.13	25.75	15.	7.97	31.46	24.53	105.	8.50	32.87	25.55
20.	8.02	31.67	24.68	100.	8.54	33.13	25.75	20.	7.97	31.53	24.58	110.	8.56	32.99	25.64
25.	8.04	31.69	24.70	105.	8.54	33.14	25.76	25.	7.97	31.56	24.60	115.	8.54	33.14	25.76
30.	8.06	31.76	24.75	110.	8.54	33.12	25.75	30.	7.99	31.57	24.61	120.	8.54	33.16	25.77
35.	8.13	31.84	24.80	115.	8.58	33.01	25.65	35.	8.07	31.72	24.72	125.	8.54	33.16	25.77
40.	8.20	31.92	24.85	120.	8.53	33.21	25.81	40.	8.12	31.79	24.76	130.	8.54	33.17	25.78
45.	8.18	32.07	24.98	125.	8.50	33.34	25.92	45.	8.16	31.84	24.79	135.	8.54	33.17	25.78
50.	8.17	32.14	25.03	130.	8.48	33.44	26.00	50.	8.16	31.87	24.82	140.	8.50	33.29	25.88
55.	8.17	32.16	25.04	135.	8.48	33.51	26.05	55.	8.17	31.88	24.82	145.	8.45	33.45	26.02
60.	8.21	32.29	25.14	140.	8.47	33.52	26.07	60.	8.19	31.94	24.87	150.	8.43	33.55	26.09
65.	8.25	32.37	25.20	145.	8.46	33.54	26.08	65.	8.15	31.98	24.91	155.	8.43	33.56	26.11
70.	8.33	32.51	25.30	150.	8.45	33.54	26.08	70.	8.13	32.09	25.00	160.	8.43	33.56	26.10
75.	8.46	32.74	25.46	155.	8.45	33.55	26.09	75.	8.14	32.10	25.00	165.	8.43	33.57	26.11
								80.	8.17	32.15	25.04	170.	8.43	33.57	26.11



REFERENCE NO. 73- 7-119 STN- JF2 DATE 16/ 3/73  
 POSITION 48-25.7N, 124-31.9W PST 5.1  
 RESULTS OF STD CAST 117 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.10	31.14	24.26	367.1	0.0	0.0	1478.
10	8.09	31.29	24.38	356.3	0.37	0.02	1479.
20	8.01	31.44	24.51	344.2	0.71	0.07	1479.
30	7.97	31.49	24.55	340.2	1.05	0.16	1479.
50	8.00	31.78	24.77	319.5	1.72	0.43	1480.
75	8.59	32.43	25.20	279.4	2.47	0.90	1483.
100	8.89	33.07	25.65	236.9	3.10	1.47	1485.
125	8.79	33.23	25.79	223.7	3.68	2.13	1486.
150	8.69	33.50	26.02	202.7	4.20	2.86	1486.
175	8.46	33.58	26.12	193.9	4.70	3.68	1486.
200	8.20	33.65	26.21	185.4	5.17	4.59	1485.

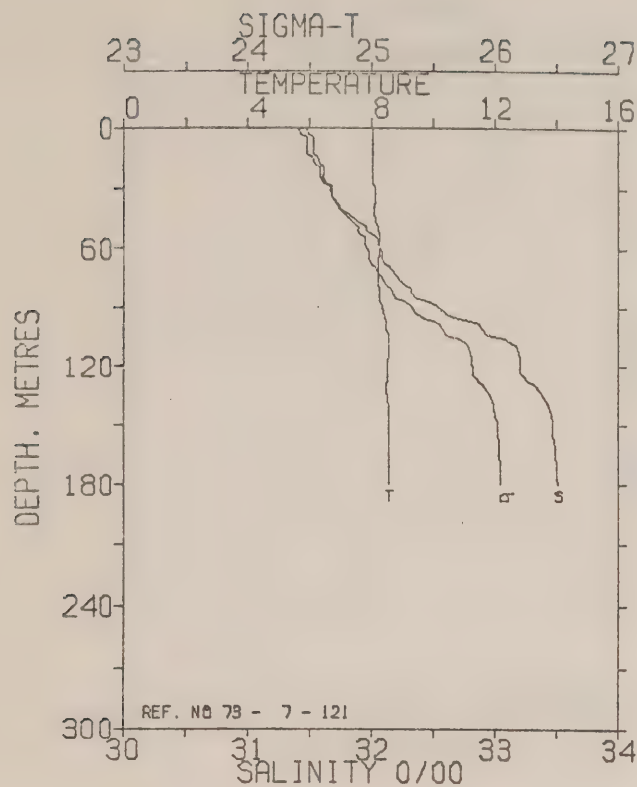
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.10	31.14	24.26	115.	8.88	33.16	25.72
5.	8.10	31.16	24.28	120.	8.85	33.17	25.74
10.	8.09	31.29	24.38	125.	8.79	33.23	25.79
15.	8.01	31.44	24.50	130.	8.65	33.42	25.96
20.	8.01	31.44	24.51	135.	8.66	33.45	25.98
25.	7.98	31.47	24.53	140.	8.69	33.46	25.99
30.	7.97	31.49	24.55	145.	8.69	33.48	26.00
35.	7.97	31.49	24.55	150.	8.69	33.50	26.02
40.	7.97	31.51	24.56	155.	8.66	33.52	26.04
45.	7.99	31.60	24.63	160.	8.51	33.63	26.07
50.	8.00	31.78	24.77	165.	8.45	33.64	26.08
55.	8.03	31.91	24.87	170.	8.46	33.56	26.10
60.	8.13	32.09	24.99	175.	8.46	33.58	26.12
65.	8.41	32.22	25.06	180.	8.45	33.59	26.12
70.	8.47	32.27	25.09	185.	8.45	33.60	26.13
75.	8.59	32.43	25.20	190.	8.40	33.62	26.16
80.	8.71	32.57	25.29	195.	8.29	33.64	26.19
85.	8.91	32.82	25.45	200.	8.20	33.65	26.21
90.	8.92	32.99	25.58	205.	8.11	33.68	26.24
95.	8.91	33.03	25.62	210.	8.02	33.69	26.26
100.	8.89	33.07	25.65	215.	7.98	33.70	26.28
105.	8.89	33.10	25.67	220.	7.95	33.71	26.29



REFERENCE NO. 73- 7-120 STN- JF3 DATE 16/ 3/73  
 POSITION 48-21.8N, 124-18.1W PST 6.1  
 RESULTS OF STD CAST 98 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.04	31.22	24.33	360.4	0.0	0.0	1478.
10	8.00	31.34	24.43	351.3	0.36	0.02	1478.
20	7.98	31.48	24.54	340.5	0.70	0.07	1479.
30	7.97	31.55	24.60	335.4	1.04	0.16	1479.
50	8.02	31.92	24.88	309.3	1.69	0.42	1480.
75	8.51	32.50	25.26	273.0	2.41	0.88	1483.
100	8.72	32.85	25.50	250.6	3.06	1.45	1484.
125	8.71	33.13	25.72	230.4	3.66	2.14	1485.
150	8.54	33.48	26.03	201.9	4.20	2.50	1485.
175	8.38	33.61	26.15	190.6	4.69	3.71	1485.
200	8.35	33.63	26.17	186.3	5.17	4.62	1486.

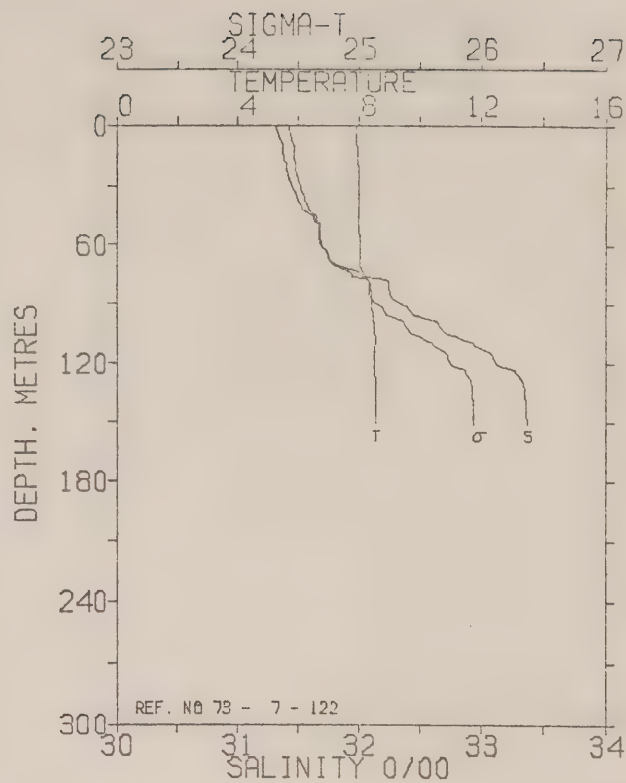
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.04	31.22	24.33	110.	8.72	32.50	25.54
5.	8.01	31.25	24.36	115.	8.77	33.06	25.66
10.	8.00	31.34	24.43	120.	8.76	33.09	25.68
15.	7.99	31.44	24.51	125.	8.71	33.13	25.72
20.	7.98	31.48	24.54	130.	8.69	33.17	25.76
25.	7.97	31.50	24.56	135.	8.62	33.25	25.83
30.	7.97	31.55	24.60	140.	8.57	33.27	25.85
35.	7.99	31.64	24.67	145.	8.58	33.44	25.99
40.	7.99	31.68	24.70	150.	8.54	33.48	26.03
45.	8.00	31.76	24.76	155.	8.48	33.52	26.06
50.	8.02	31.92	24.88	160.	8.44	33.55	26.10
55.	8.26	32.10	24.98	165.	8.42	33.58	26.12
60.	8.41	32.24	25.07	170.	8.38	33.59	26.13
65.	8.48	32.26	25.08	175.	8.38	33.61	26.15
70.	8.48	32.39	25.18	180.	8.37	33.61	26.15
75.	8.51	32.50	25.26	185.	8.36	33.62	26.16
80.	8.55	32.64	25.37	190.	8.35	33.62	26.16
85.	8.67	32.77	25.45	195.	8.35	33.62	26.16
90.	8.71	32.83	25.49	200.	8.35	33.63	26.17
95.	8.71	32.84	25.49	205.	8.34	33.63	26.17
100.	8.72	32.85	25.50	210.	8.34	33.63	26.17



REFERENCE NO. 73- 7-121 STN- JF4 DATE 16/ 3/73  
 POSITION 48-18.2N, 124- 4.5W PST 7.1  
 RESULTS OF STD CAST 82 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.04	31.41	24.48	346.2	0.0	0.0	1478.
10	8.06	31.48	24.53	341.6	0.34	0.62	1479.
20	8.05	31.58	24.61	334.3	0.68	0.07	1479.
30	8.11	31.67	24.67	328.7	1.02	0.15	1480.
50	8.19	31.96	24.88	308.7	1.66	0.41	1481.
75	8.21	32.21	25.08	290.3	2.41	0.89	1481.
100	8.49	32.88	25.56	245.0	3.08	1.49	1484.
125	8.51	33.23	25.83	219.8	3.65	2.14	1485.
150	8.54	33.47	26.02	202.7	4.17	2.87	1485.
175	8.53	33.50	26.04	200.9	4.68	3.71	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.04	31.41	24.48	90.	8.36	32.55	25.32
5.	8.06	31.48	24.53	95.	8.44	32.70	25.43
10.	8.06	31.48	24.53	100.	8.49	32.88	25.56
15.	8.04	31.52	24.56	105.	8.53	33.01	25.66
20.	8.05	31.58	24.61	110.	8.53	33.17	25.79
25.	8.06	31.59	24.61	115.	8.52	33.19	25.80
30.	8.11	31.67	24.67	120.	8.52	33.20	25.81
35.	8.10	31.69	24.69	125.	8.51	33.23	25.83
40.	8.08	31.75	24.74	130.	8.49	33.32	25.91
45.	8.10	31.86	24.82	135.	8.50	33.39	25.96
50.	8.19	32.05	24.88	140.	8.53	33.44	25.99
55.	8.26	32.96	24.94	145.	8.56	33.45	26.00
60.	8.26	32.07	24.96	150.	8.54	33.47	26.02
65.	8.22	32.08	24.98	155.	8.54	33.47	26.02
70.	8.19	32.15	25.03	160.	8.54	33.49	26.03
75.	8.21	32.21	25.08	165.	8.54	33.49	26.03
80.	8.24	32.31	25.16	170.	8.55	33.50	26.04
85.	8.25	32.36	25.19	175.	8.52	33.49	26.04

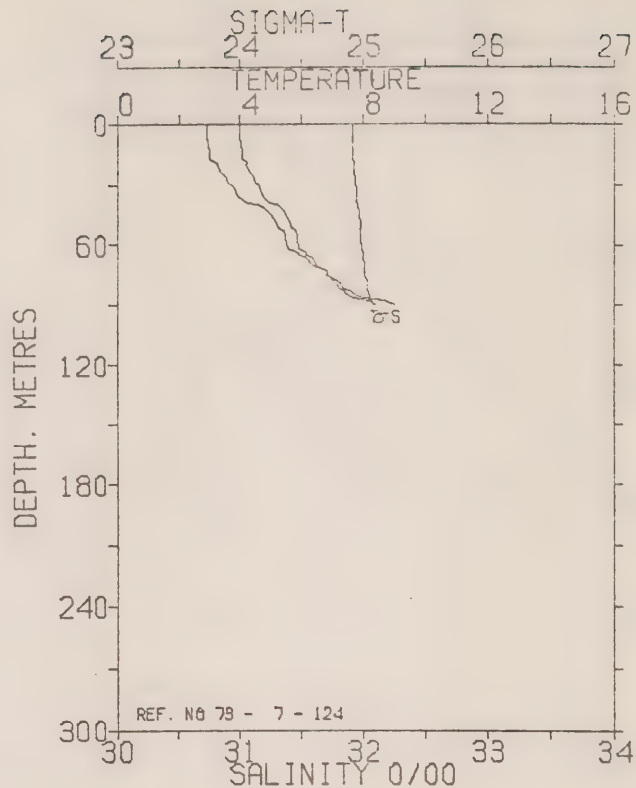
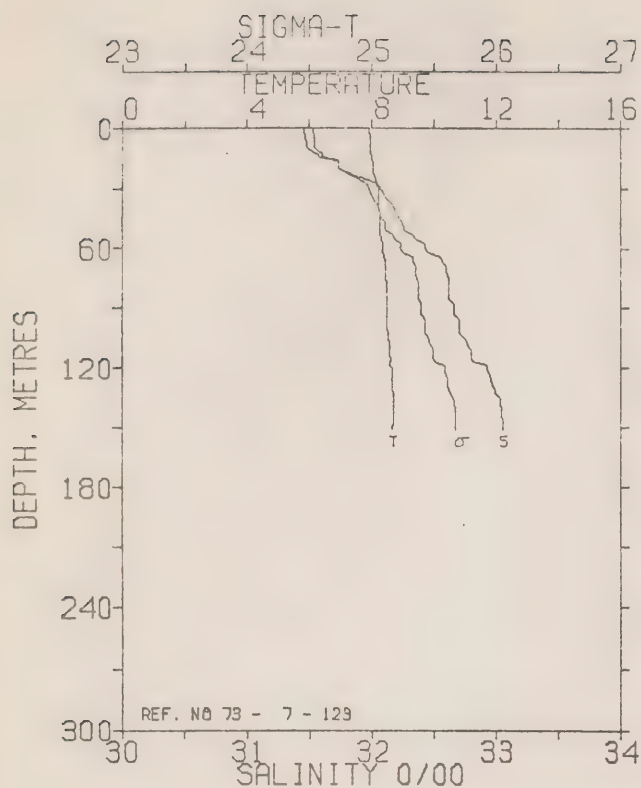


REFERENCE NO. 73- 7-122 STN- JF5 DATE 16/ 3/73  
 POSITION 48-16.6N, 123-49.5W PST 8.1  
 RESULTS OF STD CAST 68 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.91	31.31	24.42	351.8	0.0	0.0	1478.
10	7.93	31.36	24.46	348.6	0.35	0.02	1478.
20	7.96	31.40	24.48	346.6	0.70	0.07	1478.
30	7.98	31.45	24.51	343.6	1.04	0.16	1479.
50	8.01	31.67	24.68	327.8	1.72	0.43	1479.
75	8.16	32.02	24.94	304.0	2.52	0.95	1481.
100	8.50	32.64	25.38	262.8	3.23	1.58	1483.
125	8.52	33.29	25.88	215.8	3.83	2.26	1485.
150	8.54	33.37	25.94	210.1	4.36	3.00	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.91	31.31	24.42	75.	8.16	32.02	24.94
5.	7.91	31.33	24.44	80.	8.37	32.24	25.08
10.	7.93	31.36	24.46	85.	8.40	32.25	25.09
15.	7.95	31.38	24.46	90.	8.42	32.35	25.16
20.	7.96	31.40	24.48	95.	8.45	32.44	25.23
25.	7.98	31.42	24.49	100.	8.50	32.64	25.38
30.	7.98	31.45	24.51	105.	8.52	32.72	25.43
35.	7.99	31.49	24.55	110.	8.56	32.94	25.60
40.	7.99	31.52	24.57	115.	8.52	33.09	25.72
45.	8.01	31.62	24.64	120.	8.52	33.12	25.74
50.	8.01	31.67	24.68	125.	8.52	33.29	25.88
55.	8.02	31.67	24.68	130.	8.53	33.34	25.92
60.	8.03	31.68	24.69	135.	8.53	33.36	25.93
65.	8.04	31.75	24.74	140.	8.54	33.37	25.93
70.	8.06	31.80	24.78	145.	8.54	33.36	25.93





REFERENCE NO. 73- 7-123 STN- JF6 DATE 16/ 3/73  
 POSITION 48-14.5N, 123-34.5W PST 9.1  
 RESULTS OF STD CAST 77 POINTS TAKEN FROM ANALOG TRACE

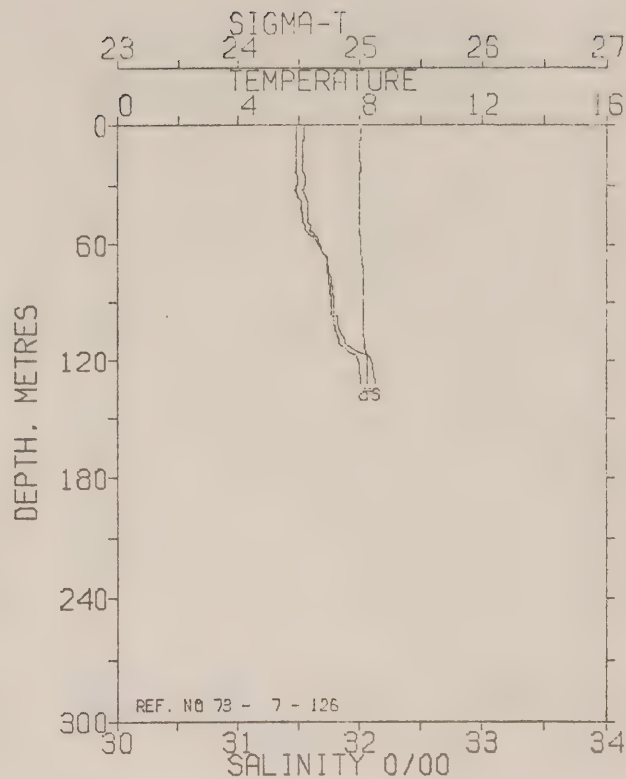
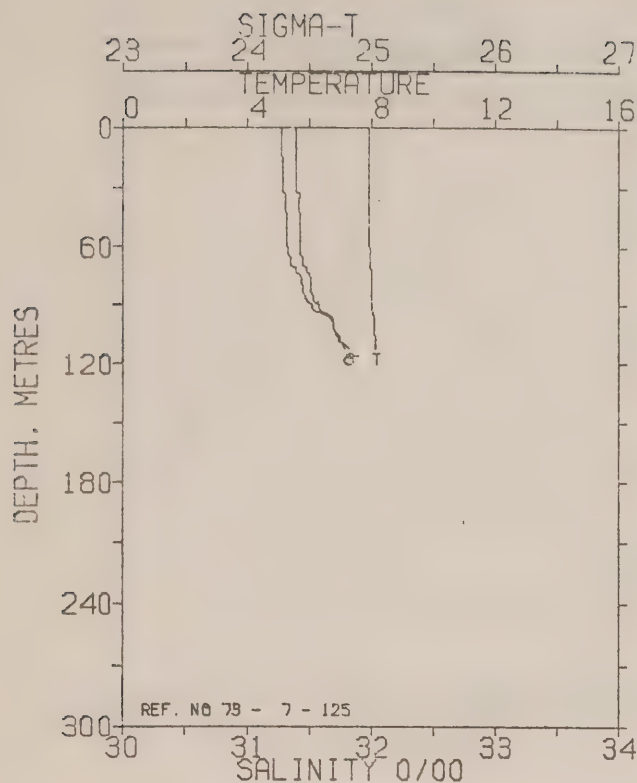
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	7.93	31.45	24.53	341.7	0.0	0.0	1478.
10	7.94	31.47	24.54	340.8	0.34	0.02	1478.
20	8.05	31.73	24.73	323.2	0.67	0.07	1479.
30	8.18	32.07	24.97	295.8	0.58	0.15	1480.
50	8.26	32.25	25.11	287.6	1.57	0.29	1481.
75	8.43	32.61	25.36	263.7	2.25	0.82	1483.
100	8.49	32.70	25.42	258.4	2.90	1.40	1483.
125	8.64	32.96	25.60	242.0	3.53	2.12	1485.
150	8.65	33.05	25.67	235.4	4.13	2.95	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.93	31.45	24.53	80.	8.45	32.62	25.37
5.	7.94	31.46	24.54	85.	8.45	32.62	25.37
10.	7.94	31.47	24.54	90.	8.47	32.65	25.39
15.	7.99	31.58	24.62	95.	8.47	32.70	25.42
20.	8.05	31.73	24.73	100.	8.49	32.70	25.42
25.	8.10	31.54	24.68	105.	8.50	32.74	25.45
30.	8.18	32.07	24.97	110.	8.54	32.79	25.48
35.	8.20	32.12	25.01	115.	8.58	32.80	25.48
40.	8.22	32.18	25.05	120.	8.63	32.83	25.58
45.	8.24	32.21	25.07	125.	8.64	32.86	25.60
50.	8.26	32.25	25.11	130.	8.65	32.98	25.61
55.	8.29	32.36	25.18	135.	8.67	33.03	25.65
60.	8.35	32.43	25.23	140.	8.66	33.04	25.66
65.	8.39	32.56	25.33	145.	8.66	33.05	25.67
70.	8.42	32.59	25.35	150.	8.65	33.05	25.67

REFERENCE NO. 73- 7-124 STN- JF7 DATE 16/ 3/73  
 POSITION 48-16.0N, 123-20.0W PST 10.1  
 RESULTS OF STD CAST 47 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	7.65	30.73	24.00	391.7	0.0	0.0	1476.
10	7.65	30.74	24.01	391.4	0.39	0.02	1476.
20	7.70	30.81	24.06	387.1	0.78	0.08	1477.
30	7.73	30.95	24.16	377.2	1.17	0.18	1477.
50	7.88	31.30	24.41	353.3	1.90	0.47	1478.
75	8.06	31.70	24.70	326.1	2.75	1.02	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.65	30.73	24.00	50.	7.88	31.30	24.41
5.	7.65	30.73	24.00	55.	7.92	31.36	24.46
10.	7.65	30.74	24.01	60.	7.93	31.38	24.47
15.	7.66	30.75	24.02	65.	7.97	31.47	24.54
20.	7.70	30.81	24.06	70.	8.01	31.58	24.61
25.	7.71	30.87	24.10	75.	8.06	31.70	24.70
30.	7.73	30.95	24.16	80.	8.11	31.82	24.79
35.	7.77	30.98	24.18	85.	8.16	31.94	24.87
40.	7.80	31.14	24.30	90.	8.33	32.25	25.09



REFERENCE NO. 73- 7-125 STN- JF8 DATE 16/ 3/73  
 POSITION 48-14.8N, 123- 5.5W PST 11.0  
 RESULTS OF STD CAST 34 POINTS TAKEN FROM ANALCG TRACE

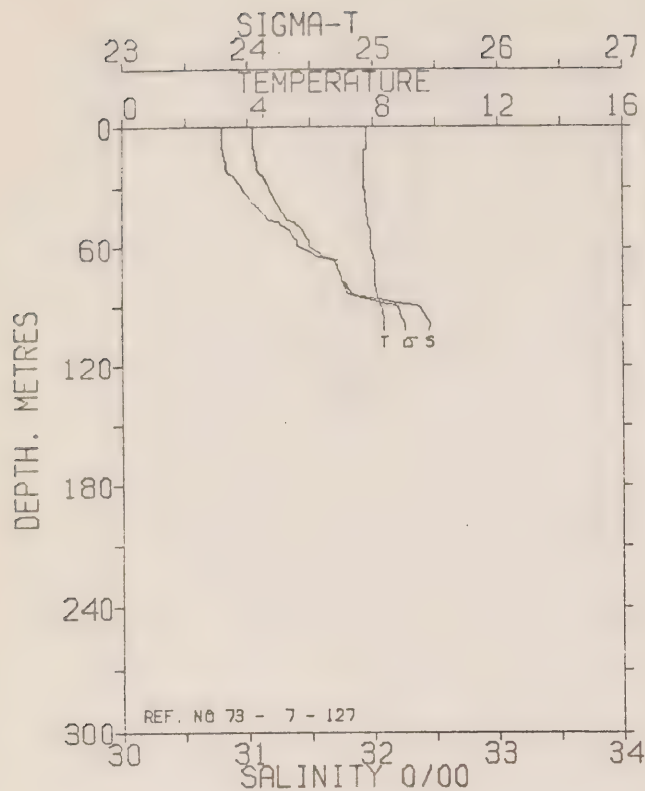
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.91	31.27	24.39	354.8	0.0	0.0	1478.
10	7.91	31.27	24.39	355.1	0.36	0.02	1478.
20	7.91	31.28	24.39	355.0	0.71	0.07	1478.
30	7.91	31.28	24.39	355.1	1.07	0.16	1478.
50	7.93	31.32	24.42	352.8	1.77	0.45	1479.
75	7.97	31.42	24.50	345.8	2.65	1.01	1479.
100	8.07	31.69	24.69	327.6	3.50	1.77	1481.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.91	31.27	24.39	60.	7.96	31.13	24.27
5.	7.91	31.27	24.39	65.	7.87	31.32	24.43
10.	7.91	31.28	24.40	70.	7.97	31.37	24.46
15.	7.91	30.77	24.00	75.	7.97	31.43	24.51
20.	7.84	31.31	24.43	80.	7.57	31.41	24.49
25.	7.91	31.30	24.41	85.	7.99	31.46	24.53
30.	7.93	31.32	24.42	90.	8.00	31.51	24.56
35.	7.90	31.29	24.41	95.	8.04	31.63	24.65
40.	7.94	30.85	24.05	100.	8.07	31.69	24.69
45.	7.94	31.35	24.44	105.	8.08	31.72	24.71
50.	7.94	30.55	23.82	110.	8.11	31.79	24.76

REFERENCE NO. 73- 7-126 STN- JF8 DATE 19/ 3/73  
 POSITION 48-14.8N, 123- 5.5W PST 13.5  
 RESULTS OF STD CAST 64 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.02	31.48	24.54	340.7	0.0	0.0	1478.
10	8.01	31.47	24.53	341.7	0.34	0.02	1479.
20	8.02	31.47	24.53	342.1	0.68	0.07	1479.
30	8.00	31.48	24.54	341.4	1.02	0.16	1479.
50	7.99	31.55	24.59	336.5	1.70	0.43	1479.
75	8.09	31.75	24.74	323.2	2.52	0.96	1480.
100	8.14	31.82	24.78	319.0	3.33	1.67	1481.
125	8.25	32.11	24.99	299.4	4.10	2.56	1482.

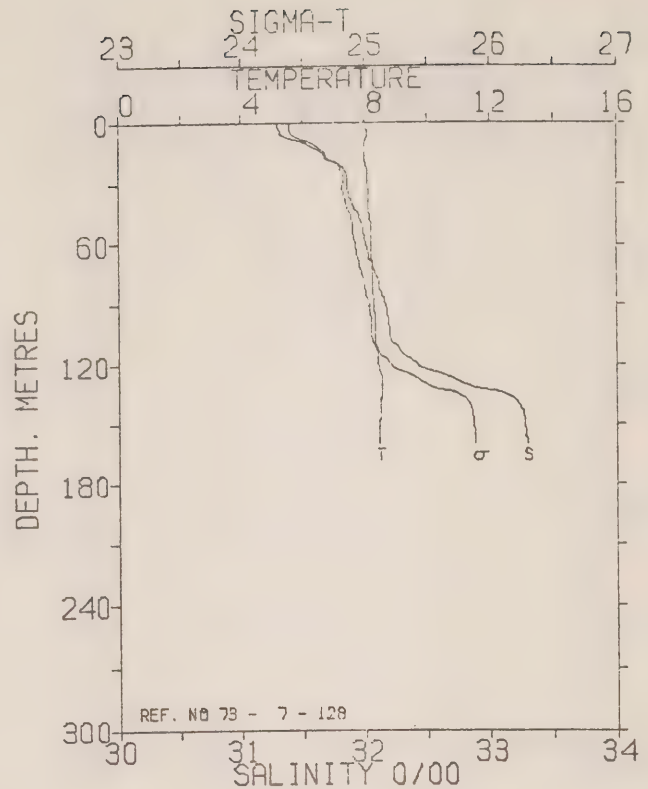
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.02	31.48	24.54	70.	8.05	31.74	24.73
5.	8.02	31.48	24.54	75.	8.09	31.75	24.74
10.	8.01	31.47	24.53	80.	8.11	31.76	24.74
15.	8.01	31.47	24.53	85.	8.11	31.77	24.75
20.	8.02	31.47	24.53	90.	8.12	31.78	24.76
25.	8.00	31.48	24.54	95.	8.12	31.79	24.76
30.	8.00	31.48	24.54	100.	8.14	31.82	24.78
35.	7.99	31.49	24.55	105.	8.14	31.84	24.80
40.	7.99	31.52	24.57	110.	8.15	31.88	24.83
45.	7.99	31.45	24.51	115.	8.18	31.98	24.90
50.	7.99	31.55	24.59	120.	8.24	32.10	24.99
55.	8.00	31.59	24.62	125.	8.25	32.11	24.99
60.	8.06	31.66	24.67	130.	8.25	32.13	25.01



REFERENCE NO. 73- 7-127 STN- JF7 DATE 19/ 3/73  
 POSITION 48-16.0N, 123-20.0W PST 14.9  
 RESULTS OF STD CAST 68 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.78	30.79	24.03	388.9	0.0	0.0	1477.
10	7.77	30.79	24.03	389.3	0.39	0.02	1477.
20	7.68	30.82	24.07	386.1	0.78	0.08	1477.
30	7.71	30.95	24.17	376.6	1.16	0.18	1477.
50	7.87	31.30	24.42	353.1	1.89	0.48	1478.
75	8.04	31.74	24.74	322.9	2.74	1.01	1480.
100	8.33	32.45	25.25	274.7	3.48	1.67	1482.

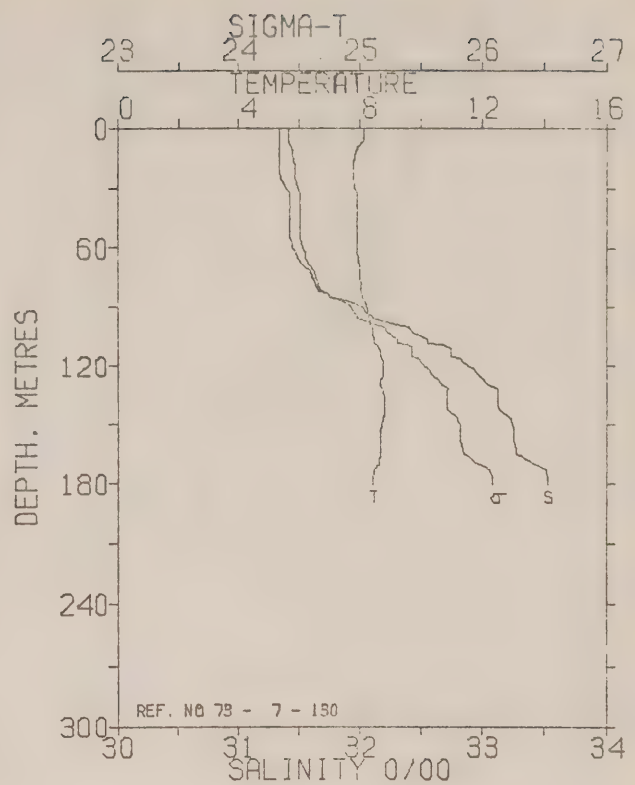
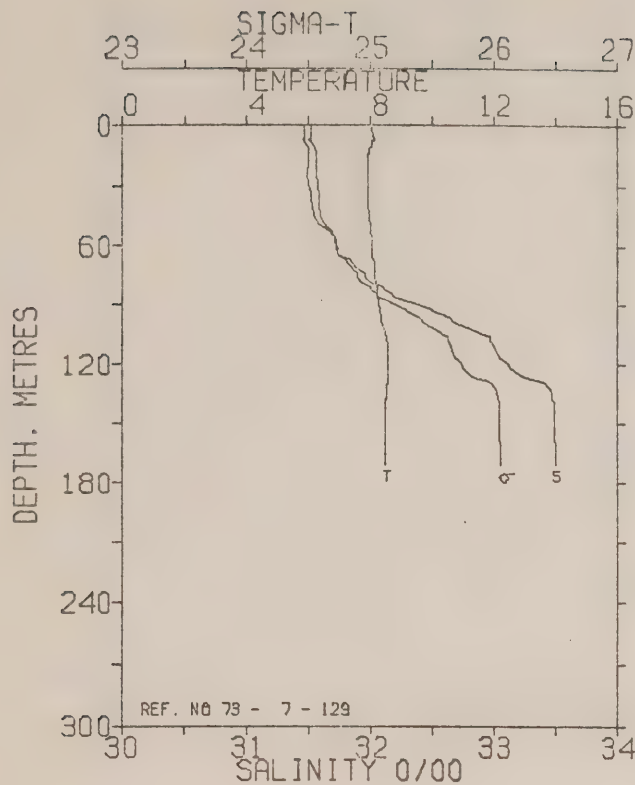
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.78	30.79	24.03	55.	7.89	31.27	24.46
5.	7.78	30.79	24.03	60.	7.92	31.43	24.51
10.	7.77	30.79	24.03	65.	7.99	31.62	24.65
15.	7.68	30.81	24.06	70.	8.03	31.70	24.71
20.	7.68	30.82	24.07	75.	8.04	31.74	24.74
25.	7.69	30.89	24.12	80.	8.07	31.79	24.77
30.	7.71	30.95	24.17	85.	8.12	31.98	24.91
35.	7.74	31.01	24.21	90.	8.25	32.37	25.20
40.	7.77	31.08	24.26	95.	8.32	32.42	25.23
45.	7.80	31.15	24.31	100.	8.33	32.45	25.25



REFERENCE NO. 73- 7-128 STN- JF6 DATE 19/ 3/73  
 POSITION 48-14.5N, 123-34.6W PST 15.5  
 RESULTS OF STD CAST 90 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.04	31.28	24.38	355.8	0.0	0.0	1478.
10	7.98	31.51	24.56	338.8	0.35	0.02	1478.
20	8.04	31.78	24.77	319.3	0.68	0.07	1479.
30	8.08	31.86	24.82	314.1	1.00	0.15	1480.
50	8.18	31.98	24.90	307.0	1.62	0.40	1480.
75	8.25	32.08	24.97	300.5	2.38	0.89	1481.
100	8.32	32.19	25.05	293.8	3.12	1.55	1482.
125	8.51	32.64	25.37	263.6	3.83	2.37	1484.
150	8.49	33.27	25.87	216.7	4.41	3.17	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.04	31.28	24.38	85.	8.28	32.13	25.01
5.	8.07	31.32	24.40	90.	8.30	32.17	25.04
10.	7.98	31.51	24.56	95.	8.32	32.18	25.04
15.	7.99	31.66	24.68	100.	8.32	32.19	25.05
20.	8.04	31.78	24.77	105.	8.33	32.20	25.05
25.	8.08	31.85	24.82	110.	8.36	32.26	25.10
30.	8.08	31.86	24.82	115.	8.40	32.31	25.13
35.	8.10	31.86	24.83	120.	8.44	32.42	25.21
40.	8.12	31.89	24.84	125.	8.51	32.64	25.37
45.	8.15	31.95	24.88	130.	8.54	32.81	25.50
50.	8.18	31.98	24.90	135.	8.52	33.13	25.75
55.	8.19	31.99	24.91	140.	8.50	33.23	25.84
60.	8.21	32.01	24.92	145.	8.50	33.26	25.86
65.	8.22	32.02	24.93	150.	8.49	33.27	25.87
70.	8.23	32.06	24.96	155.	8.49	33.28	25.88
75.	8.25	32.08	24.97	160.	8.49	33.29	25.88



REFERENCE NO. 73- 7-129 STN- JF5 DATE 19/ 3/73  
 POSITION 48-16.6N, 123-49.5W PST 17.4  
 RESULTS OF STD CAST 76 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.05	31.46	24.52	342.6	0.0	0.0	1479.
10	8.02	31.47	24.53	341.9	0.34	0.02	1479.
20	7.91	31.49	24.56	339.1	0.68	0.07	1478.
30	7.91	31.50	24.57	338.6	1.02	0.16	1479.
50	7.97	31.60	24.64	332.1	1.65	0.43	1479.
75	8.13	31.95	24.89	308.5	2.50	0.94	1481.
100	8.37	32.72	25.45	255.4	3.21	1.57	1483.
125	8.57	33.20	25.80	223.1	3.80	2.25	1485.
150	8.49	33.49	26.04	200.4	4.31	2.96	1485.

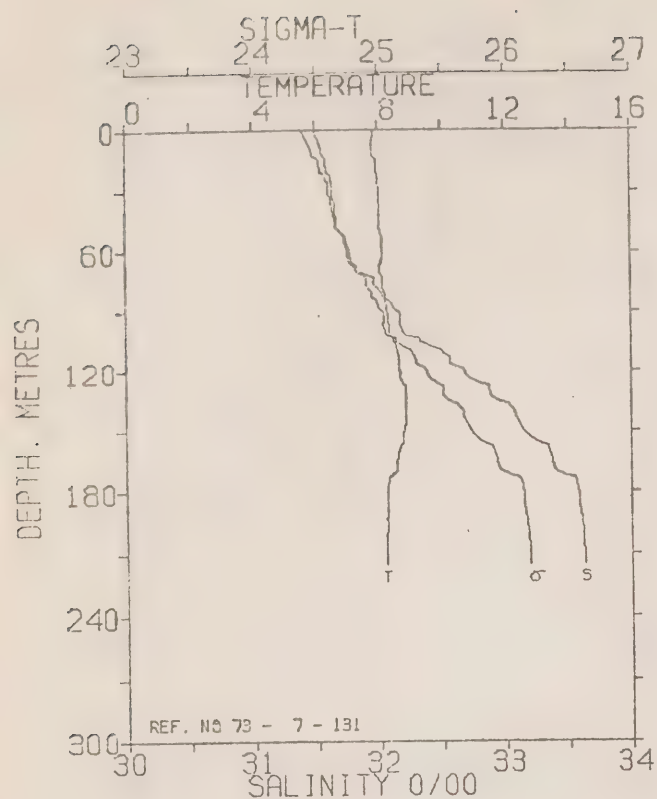
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.05	31.46	24.52	85.	8.22	32.18	25.05
5.	8.08	31.46	24.51	90.	8.27	32.40	25.22
10.	8.02	31.47	24.53	95.	8.32	32.58	25.36
15.	7.91	31.49	24.56	100.	8.37	32.72	25.45
20.	7.91	31.49	24.56	105.	8.49	32.91	25.59
25.	7.90	31.49	24.56	110.	8.53	32.99	25.64
30.	7.91	31.50	24.57	115.	8.55	32.97	25.62
35.	7.93	31.52	24.58	120.	8.55	33.11	25.73
40.	7.93	31.53	24.59	125.	8.57	33.20	25.80
45.	7.94	31.54	24.59	130.	8.51	33.43	25.99
50.	7.97	31.60	24.64	135.	8.50	33.47	26.02
55.	8.02	31.71	24.71	140.	8.48	33.50	26.04
60.	8.03	31.72	24.72	145.	8.49	33.49	26.04
65.	8.04	31.75	24.75	150.	8.50	33.49	26.04
70.	8.10	31.86	24.82	155.	8.48	33.49	26.04
75.	8.13	31.95	24.89	160.	8.47	33.50	26.05
80.	8.17	32.05	24.96	165.	8.47	33.50	26.05

REFERENCE NO. 73- 7-130 STN- JF4 DATE 19/ 3/73  
 POSITION 48-17.8N, 124- 4.5W PST 18.5  
 RESULTS OF STD CAST 101 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.13	31.34	24.41	352.7	0.0	0.0	1479.
10	7.92	31.33	24.43	351.0	0.35	0.02	1478.
20	7.75	31.34	24.46	348.2	0.70	0.07	1478.
30	7.84	31.39	24.49	345.9	1.05	0.16	1478.
50	7.91	31.43	24.51	344.3	1.74	0.44	1479.
75	8.01	31.60	24.63	332.8	2.59	0.98	1480.
100	8.39	32.40	25.20	279.2	3.37	1.68	1483.
125	8.76	32.97	25.59	242.7	4.02	2.42	1485.
150	8.71	33.24	25.81	222.2	4.60	3.23	1486.
175	8.44	33.52	26.07	198.2	5.14	4.12	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.13	31.34	24.41	95.	8.30	32.10	24.98
5.	8.12	31.34	24.41	100.	8.39	32.40	25.20
10.	7.92	31.33	24.43	105.	8.44	32.50	25.28
15.	7.80	31.33	24.45	110.	8.60	32.73	25.43
20.	7.75	31.34	24.46	115.	8.69	32.75	25.43
25.	7.79	31.35	24.47	120.	8.77	32.88	25.52
30.	7.84	31.39	24.49	125.	8.76	32.97	25.59
35.	7.90	31.42	24.51	130.	8.69	33.06	25.67
40.	7.92	31.43	24.51	135.	8.78	33.13	25.71
45.	7.90	31.38	24.47	140.	8.79	33.13	25.71
50.	7.86	31.42	24.51	145.	8.76	33.19	25.76
55.	7.90	31.36	24.46	150.	8.71	33.24	25.81
60.	7.90	31.48	24.55	155.	8.70	33.25	25.82
65.	7.94	31.48	24.55	160.	8.69	33.26	25.83
70.	7.97	31.55	24.60	165.	8.67	33.28	25.85
75.	8.01	31.60	24.63	170.	8.60	33.43	25.98
80.	8.04	31.65	24.67	175.	8.44	33.52	26.07
85.	8.09	31.77	24.75	180.	8.43	33.53	26.08

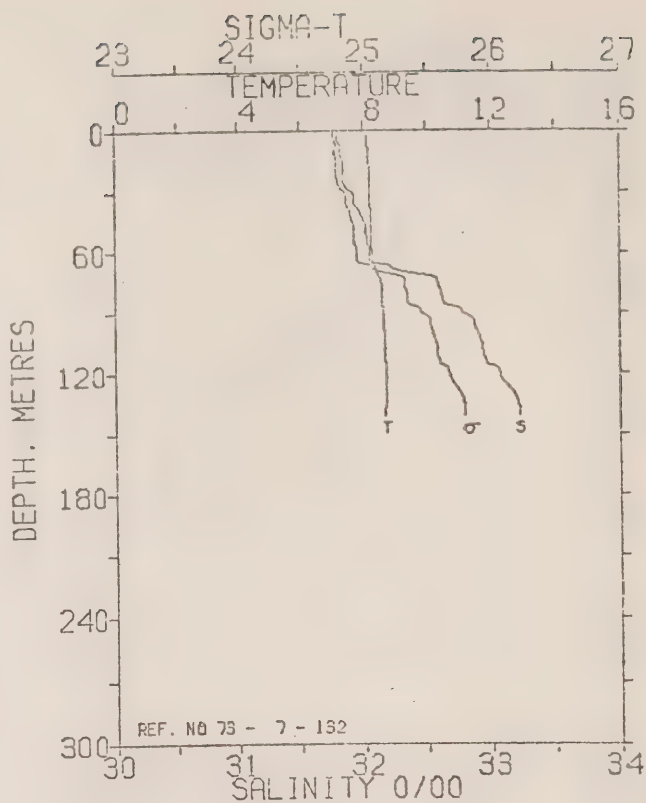




REFERENCE NO. 73- 7-131 STN- JF3 DATE 19/ 3/73  
 POSITION 48-21.7N, 124-18.0W PST 19.5  
 RESULTS OF STD CAST 117 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.88	31.40	24.50	344.7	0.0	0.0	1478.
10	7.83	31.46	24.54	340.4	0.34	0.02	1478.
20	7.96	31.54	24.59	336.1	0.68	0.07	1479.
30	8.03	31.61	24.63	332.2	1.01	0.15	1479.
40	8.08	31.69	24.69	327.2	1.67	0.42	1480.
50	8.10	31.96	24.90	307.4	2.47	0.53	1481.
100	8.33	32.20	25.05	293.7	3.22	1.60	1482.
125	8.73	32.78	25.44	256.7	3.90	2.38	1485.
150	8.78	33.15	25.73	230.0	4.51	3.22	1486.
175	8.28	33.56	26.13	192.9	5.04	4.10	1485.
200	8.22	33.62	26.18	188.1	5.51	5.01	1485.

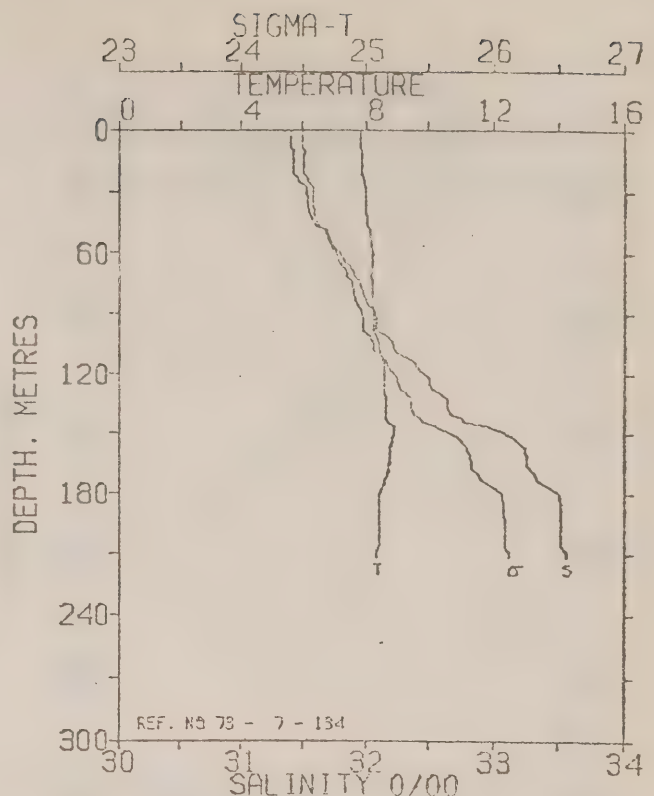
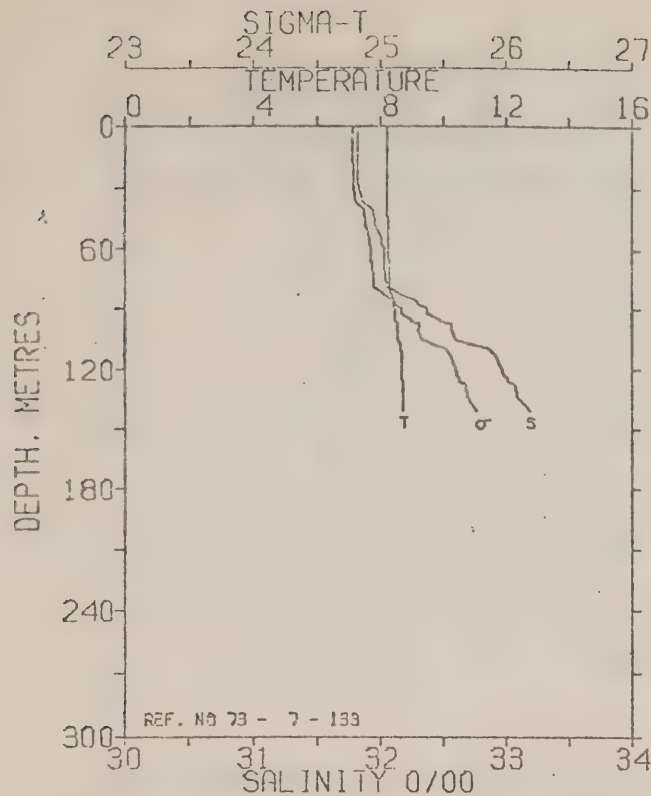
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.88	31.40	24.50	110.	8.58	32.50	25.25
5.	7.84	31.43	24.52	115.	8.63	32.57	25.30
10.	7.83	31.46	24.54	120.	8.65	32.67	25.38
15.	7.94	31.53	24.59	125.	8.73	32.78	25.44
20.	7.96	31.54	24.59	130.	8.83	32.88	25.51
25.	7.99	31.59	24.63	135.	8.84	32.97	25.58
30.	8.03	31.61	24.63	140.	8.82	33.08	25.66
35.	8.03	31.62	24.65	145.	8.81	33.10	25.69
40.	8.05	31.64	24.65	150.	8.78	33.15	25.73
45.	8.06	31.66	24.67	155.	8.73	33.26	25.83
50.	8.08	31.69	24.69	160.	8.59	33.35	25.92
55.	8.10	31.75	24.73	165.	8.56	33.37	25.94
60.	8.10	31.78	24.75	170.	8.47	33.42	25.99
65.	8.07	31.79	24.77	175.	8.28	33.56	26.13
70.	8.05	31.85	24.82	180.	8.27	33.59	26.15
75.	8.10	31.96	24.90	185.	8.26	33.59	26.15
80.	8.17	32.02	24.94	190.	8.25	33.60	26.16
85.	8.22	32.09	24.99	195.	8.23	33.61	26.17
90.	8.28	32.15	25.02	200.	8.22	33.62	26.18
95.	8.30	32.17	25.04	205.	8.19	33.62	26.18
100.	8.33	32.20	25.05	210.	8.18	33.63	26.19
105.	8.43	32.33	25.13	215.	8.18	33.63	26.19



REFERENCE NO. 73- 7-132 STN- DATE 19/ 3/73  
 POSITION 45-15.8N 123-47.2W  
 RESULTS OF STD CAST 71 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.11	31.77	24.75	320.3	0.0	0.0	1479.
10	8.15	31.81	24.78	318.4	0.32	0.02	1480.
20	8.18	31.83	24.79	317.4	0.64	0.06	1480.
30	8.21	31.91	24.85	311.8	0.55	0.15	1480.
40	8.26	32.02	24.92	305.2	1.57	0.40	1481.
50	8.26	32.59	25.32	267.3	2.31	0.87	1483.
100	8.66	32.90	25.55	246.1	2.95	1.44	1484.
125	8.71	33.11	25.71	231.5	3.55	2.13	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.11	31.77	24.75	75.	8.56	32.59	25.32
5.	8.13	31.80	24.77	80.	8.58	32.62	25.34
10.	8.15	31.81	24.78	85.	8.58	32.63	25.36
15.	8.17	31.83	24.79	90.	8.62	32.77	25.46
20.	8.18	31.83	24.79	95.	8.64	32.87	25.53
25.	8.19	31.84	24.79	100.	8.66	32.90	25.55
30.	8.21	31.91	24.85	105.	8.68	32.93	25.58
35.	8.22	31.93	24.86	110.	8.69	32.95	25.59
40.	8.23	31.97	24.89	115.	8.71	32.97	25.60
45.	8.26	32.01	24.91	120.	8.72	33.07	25.68
50.	8.26	32.02	24.92	125.	8.71	33.11	25.71
55.	8.27	32.03	24.93	130.	8.71	33.18	25.76
60.	8.28	32.05	24.94	135.	8.71	33.22	25.79
65.	8.29	32.08	24.97	140.	8.70	33.23	25.80



REFERENCE NO. 73-7-133 STN-  
 POSITION 48-15.8N, 123-47.2W  
 RESULTS OF STD CAST 55 POINTS TAKEN FROM ANALOG TRACE

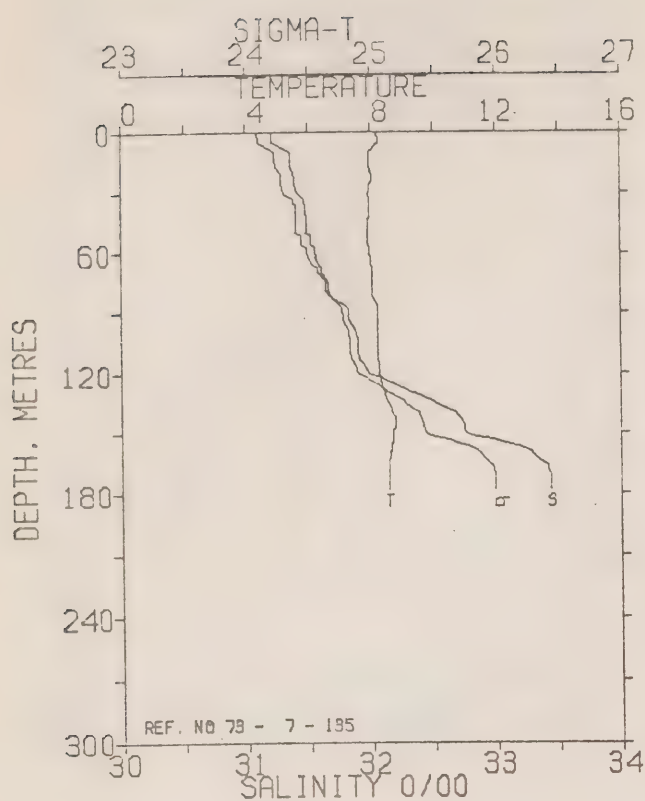
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.18	31.81	24.77	318.3	0.0	0.0	1479.
10	8.18	31.81	24.77	318.8	0.32	0.02	1480.
20	8.18	31.82	24.78	318.3	0.64	0.07	1480.
30	8.19	31.83	24.79	317.9	0.96	0.15	1480.
40	8.24	31.87	24.89	308.3	1.58	0.40	1481.
50	8.28	32.04	24.94	303.9	2.34	0.89	1481.
100	8.56	32.56	25.30	267.9	3.06	1.53	1484.
125	8.70	33.01	25.63	239.3	3.69	2.25	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.18	31.81	24.77	75.	8.28	32.04	24.94
5.	8.18	31.81	24.77	80.	8.31	32.10	24.98
10.	8.18	31.79	24.75	85.	8.41	32.28	25.11
15.	8.18	31.82	24.73	90.	8.45	32.37	25.17
20.	8.16	31.78	24.75	95.	8.49	32.48	25.25
25.	8.18	31.80	24.77	100.	8.56	32.56	25.30
30.	8.17	31.85	24.80	105.	8.57	32.59	25.33
35.	8.20	31.63	24.79	110.	8.64	32.87	25.53
40.	8.21	31.93	24.86	115.	8.67	32.53	25.57
45.	8.23	31.95	24.88	120.	8.69	32.56	25.60
50.	8.24	31.97	24.89	125.	8.70	33.01	25.63
55.	8.26	32.01	24.91	130.	8.72	33.08	25.68
60.	8.27	32.03	24.93	135.	8.72	33.10	25.70
65.	8.28	32.02	24.92	140.	8.71	33.17	25.76

REFERENCE NO. 73-7-134 STN- A  
 POSITION 48-22.7N, 124-21.0W PST 3.1  
 RESULTS OF STD CAST 105 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	7.85	31.40	24.50	344.4	0.0	0.0	1478.
10	7.87	31.42	24.51	343.5	0.34	0.02	1478.
20	7.83	31.42	24.51	344.0	0.65	0.07	1478.
30	7.98	31.53	24.53	337.2	1.03	0.16	1479.
40	8.14	31.70	24.69	327.3	1.70	0.43	1480.
50	8.18	31.96	24.89	308.5	2.50	0.64	1481.
75	8.30	32.13	25.00	298.1	3.25	1.61	1482.
100	8.59	32.51	25.26	274.3	3.97	2.43	1484.
125	8.89	33.09	25.66	236.5	4.62	3.24	1486.
150	8.55	33.39	25.95	209.4	5.18	4.26	1486.
175	8.40	33.53	26.08	197.4	5.67	5.21	1486.

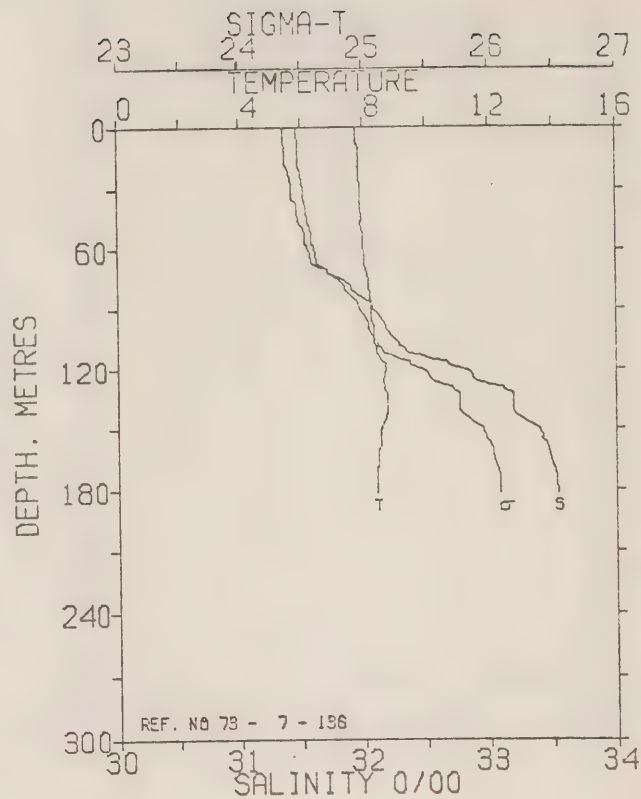
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.85	31.40	24.50	110.	8.45	32.28	25.09
5.	7.84	31.40	24.50	115.	8.59	32.40	25.17
10.	7.87	31.42	24.51	120.	8.59	32.47	25.22
15.	7.88	31.42	24.51	125.	8.59	32.51	25.26
20.	7.88	31.42	24.51	130.	8.59	32.59	25.32
25.	7.94	31.47	24.54	135.	8.61	32.65	25.36
30.	7.98	31.53	24.58	140.	8.62	32.68	25.38
35.	7.99	31.54	24.59	145.	8.76	32.86	25.51
40.	8.01	31.55	24.59	150.	8.85	32.09	25.66
45.	8.04	31.58	24.61	155.	8.80	33.21	25.77
50.	8.14	31.70	24.69	160.	8.76	33.24	25.80
55.	8.16	31.74	24.72	165.	8.72	33.26	25.83
60.	8.19	31.80	24.76	170.	8.66	33.32	25.88
65.	8.21	31.84	24.79	175.	8.55	33.39	25.95
70.	8.17	31.90	24.85	180.	8.44	33.51	26.06
75.	8.18	31.56	24.89	185.	8.43	33.52	26.07
80.	8.21	31.98	24.90	190.	8.41	33.52	26.08
85.	8.22	32.02	24.93	195.	8.41	33.53	26.08
90.	8.26	32.07	24.97	200.	8.40	33.53	26.08
95.	8.26	32.08	24.97	205.	8.42	33.52	26.03
100.	8.30	32.13	25.00	210.	8.34	33.57	26.12



REFERENCE NO. 73- 7-135 STN- B DATE 20/ 3/73  
 POSITION 48-17.0N, 124-12.0W PST 4.0  
 RESULTS OF STD CAST 86 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	8.20	31.09	24.21	372.2	0.0	0.0	1479.
10	7.96	31.23	24.35	359.0	0.37	0.02	1478.
20	7.98	31.27	24.38	356.5	0.73	0.07	1478.
30	7.91	31.30	24.41	353.1	1.08	0.16	1478.
50	7.93	31.40	24.48	346.8	1.78	0.45	1479.
75	8.06	31.64	24.65	331.1	2.62	0.99	1480.
100	8.22	31.88	24.82	315.7	3.43	1.71	1481.
125	8.33	32.19	25.04	294.6	4.21	2.60	1483.
150	8.68	32.75	25.43	258.1	4.89	3.55	1485.
175	8.53	33.44	25.99	205.6	5.44	4.45	1486.

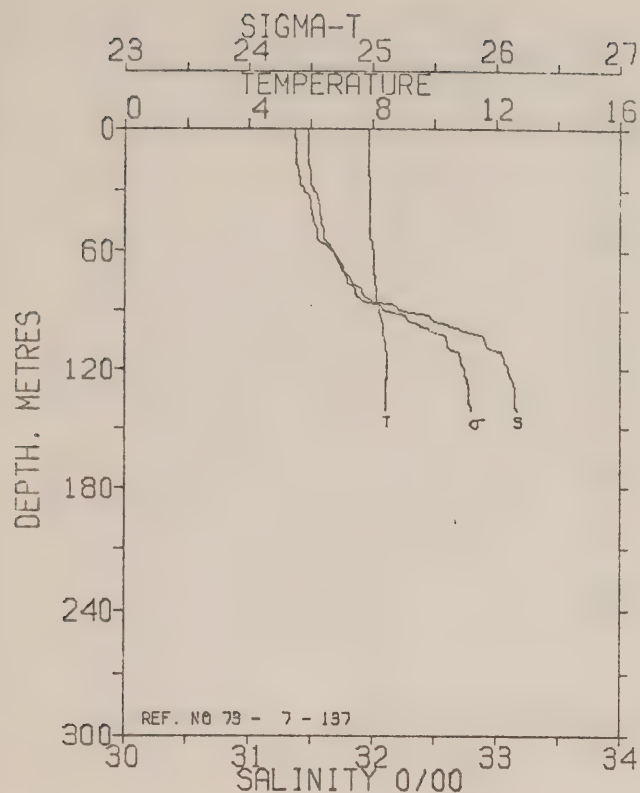
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.20	31.09	24.21	90.	8.22	31.82	24.77
5.	8.25	31.10	24.21	95.	8.22	31.84	24.79
10.	7.96	31.23	24.35	100.	8.22	31.88	24.82
15.	7.95	31.24	24.35	105.	8.22	31.89	24.83
20.	7.98	31.27	24.38	110.	8.22	31.89	24.83
25.	7.98	31.29	24.39	115.	8.23	31.84	24.86
30.	7.91	31.30	24.41	120.	8.26	31.88	24.89
35.	7.94	31.38	24.47	125.	8.33	32.19	25.04
40.	7.94	31.40	24.48	130.	8.41	32.37	25.17
45.	7.92	31.40	24.48	135.	8.54	32.52	25.27
50.	7.93	31.40	24.48	140.	8.69	32.69	25.38
55.	7.93	31.45	24.52	145.	8.76	32.74	25.41
60.	7.95	31.49	24.55	150.	8.68	32.75	25.43
65.	7.99	31.52	24.57	155.	8.64	33.07	25.69
70.	8.03	31.57	24.61	160.	8.58	33.29	25.87
75.	8.06	31.64	24.65	165.	8.54	33.38	25.95
80.	8.07	31.65	24.66	170.	8.53	33.43	25.98
85.	8.16	31.76	24.73	175.	8.53	33.44	25.99



REFERENCE NO. 73- 7-136 STN- C DATE 20/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 5.1  
 RESULTS OF STD CAST 97 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	7.79	31.35	24.47	347.3	0.0	0.0	1477.
10	7.86	31.37	24.47	347.2	0.35	0.02	1478.
20	7.87	31.39	24.49	346.0	0.69	0.07	1478.
30	7.90	31.43	24.51	343.7	1.04	0.16	1478.
50	7.95	31.51	24.57	338.5	1.72	0.44	1479.
75	8.16	31.84	24.80	317.2	2.56	0.97	1481.
100	8.32	32.18	25.04	294.6	3.31	1.64	1482.
125	8.65	32.89	25.54	247.3	4.00	2.43	1485.
150	8.57	33.40	25.96	208.3	4.57	3.22	1485.
175	8.42	33.53	26.08	197.0	5.07	4.05	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.79	31.35	24.47	90.	8.25	32.07	24.97
5.	7.80	31.35	24.47	95.	8.27	32.15	25.02
10.	7.86	31.37	24.47	100.	8.32	32.18	25.04
15.	7.86	31.37	24.47	105.	8.33	32.25	25.09
20.	7.87	31.39	24.49	110.	8.40	32.33	25.15
25.	7.87	31.41	24.50	115.	8.56	32.56	25.30
30.	7.90	31.43	24.51	120.	8.71	32.79	25.46
35.	7.91	31.43	24.51	125.	8.65	32.89	25.54
40.	7.92	31.47	24.54	130.	8.70	33.12	25.71
45.	7.94	31.48	24.54	135.	8.77	33.19	25.76
50.	7.95	31.51	24.57	140.	8.80	33.19	25.75
55.	7.97	31.53	24.58	145.	8.66	33.27	25.84
60.	8.00	31.56	24.60	150.	8.57	33.40	25.96
65.	8.01	31.58	24.61	155.	8.53	33.42	25.98
70.	8.07	31.71	24.71	160.	8.48	33.47	26.03
75.	8.16	31.84	24.80	165.	8.45	33.49	26.05
80.	8.17	31.90	24.85	170.	8.42	33.52	26.07
85.	8.22	32.02	24.93	175.	8.42	33.53	26.08



REFERENCE NO. 73- 7-137 STN- D DATE 20/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 6.1  
 RESULTS OF STD CAST 72 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.86	31.37	24.47	346.7	0.0	0.0	1478.
10	7.87	31.38	24.48	346.7	0.35	0.02	1478.
20	7.87	31.40	24.49	345.3	0.69	0.07	1478.
30	7.92	31.44	24.52	343.3	1.04	0.16	1478.
50	7.93	31.55	24.60	335.6	1.72	0.43	1479.
75	8.08	31.83	24.80	317.1	2.53	0.55	1480.
100	8.33	32.72	25.46	255.1	3.26	1.60	1483.
125	8.43	33.13	25.76	226.4	3.85	2.27	1484.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.86	31.37	24.47	75.	8.08	31.83	24.80
5.	7.86	31.38	24.48	80.	8.11	31.91	24.86
10.	7.87	31.38	24.48	85.	8.13	31.99	24.92
15.	7.87	31.38	24.48	90.	8.22	32.21	25.08
20.	7.87	31.40	24.49	95.	8.29	32.50	25.30
25.	7.89	31.41	24.50	100.	8.33	32.72	25.46
30.	7.92	31.44	24.52	105.	8.38	32.50	25.60
35.	7.93	31.50	24.56	110.	8.43	32.97	25.64
40.	7.93	31.51	24.57	115.	8.49	33.07	25.71
45.	7.93	31.52	24.58	120.	8.47	33.10	25.74
50.	7.93	31.55	24.60	125.	8.43	33.13	25.76
55.	7.96	31.58	24.62	130.	8.41	33.15	25.78
60.	8.02	31.67	24.68	135.	8.40	33.15	25.78
65.	8.05	31.73	24.73	140.	8.41	33.16	25.79

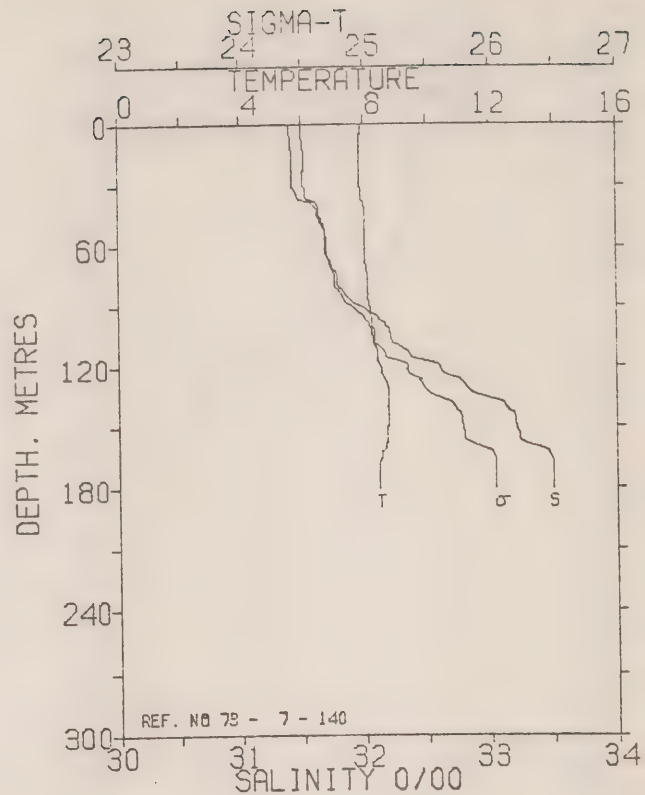
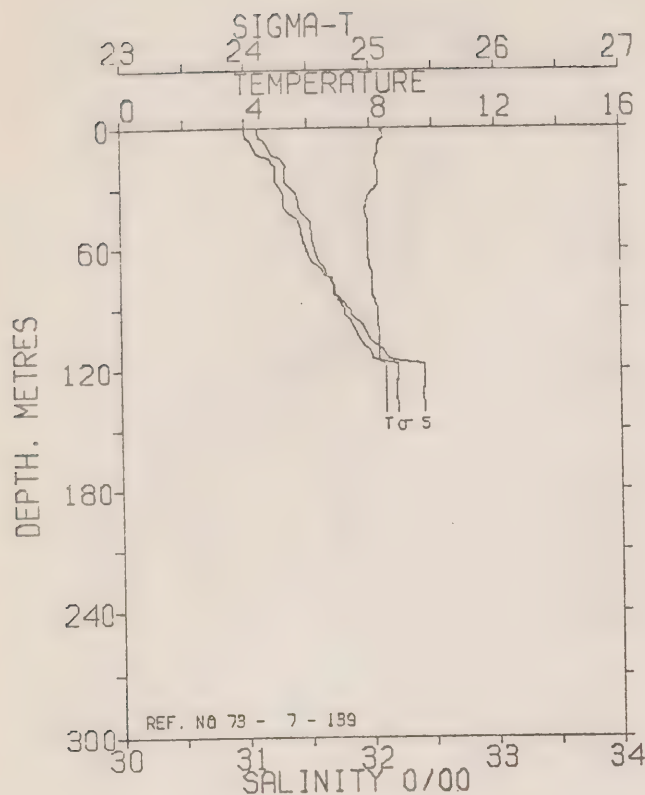


REFERENCE NO. 73- 7-138 STN- A DATE 20/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 7.1  
 RESULTS OF STD CAST 92 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	7.76	31.19	24.35	358.8	0.0	0.0	1477.
10	7.75	31.22	24.37	357.4	0.36	0.02	1477.
20	7.82	31.37	24.48	346.9	0.71	0.07	1478.
30	7.89	31.41	24.50	345.0	1.06	0.16	1478.
50	7.95	31.48	24.55	340.8	1.74	0.44	1479.
75	7.98	31.57	24.61	334.7	2.59	0.58	1480.
100	8.18	31.96	24.89	309.3	3.41	1.71	1481.
125	8.62	32.87	25.53	248.5	4.11	2.51	1485.
150	8.67	33.32	25.88	216.0	4.70	3.33	1486.
175	8.31	33.58	26.14	191.8	5.20	4.16	1485.
200	8.25	33.61	26.17	189.2	5.67	5.07	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.76	31.19	24.35	105.	8.23	32.12	25.01
5.	7.78	31.20	24.35	110.	8.31	32.22	25.08
10.	7.75	31.22	24.37	115.	8.36	32.52	25.30
15.	7.79	31.26	24.40	120.	8.59	32.67	25.38
20.	7.82	31.37	24.48	125.	8.62	32.87	25.53
25.	7.86	31.40	24.50	130.	8.76	32.93	25.56
30.	7.89	31.41	24.50	135.	8.80	32.98	25.59
35.	7.92	31.44	24.52	140.	8.83	33.13	25.70
40.	7.95	31.47	24.53	145.	8.74	33.26	25.82
45.	7.95	31.47	24.54	150.	8.67	33.22	25.88
50.	7.95	31.48	24.55	155.	8.63	33.33	25.89
55.	7.95	31.49	24.55	160.	8.39	33.52	26.08
60.	7.95	31.50	24.56	165.	8.32	33.57	26.12
65.	7.97	31.51	24.56	170.	8.32	33.58	26.13
70.	7.97	31.50	24.56	175.	8.31	33.58	26.14
75.	7.98	31.57	24.61	180.	8.32	33.58	26.14
80.	8.02	31.60	24.63	185.	8.29	33.59	26.14
85.	8.04	31.65	24.66	190.	8.28	33.59	26.15
90.	8.06	31.69	24.69	195.	8.27	33.61	26.17
95.	8.14	31.82	24.79	200.	8.25	33.61	26.17
100.	8.18	31.96	24.89	205.	8.24	33.62	26.18





REFERENCE NO. 73- 7-139 STN- B DATE 20/ 3/73  
 POSITION 48-17.0N, 124-12.0W PST 8.0  
 RESULTS OF STD CAST 69 POINTS TAKEN FROM ANALOG TRACE

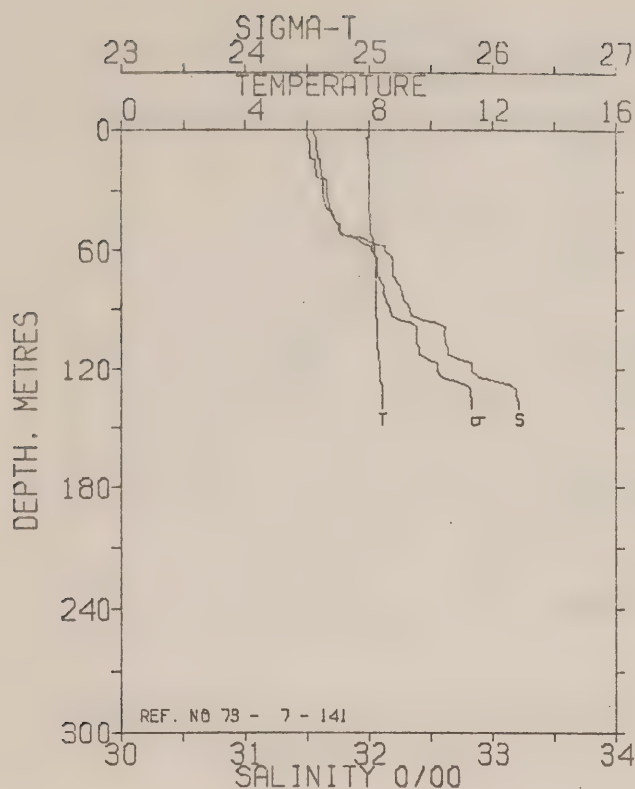
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA E	POT EN	SOUND VEL
0	8.39	30.99	24.10	382.3	0.0	0.0	1479.
10	8.25	31.07	24.18	374.8	0.38	0.02	1479.
20	8.21	31.24	24.32	361.9	0.75	0.08	1479.
30	8.11	31.28	24.37	357.7	1.11	0.17	1479.
50	7.90	31.44	24.52	343.1	1.81	0.45	1479.
75	8.03	31.68	24.69	327.5	2.65	0.99	1480.
100	8.23	31.95	24.87	310.4	3.45	1.70	1481.
125	8.47	32.42	25.20	279.6	4.19	2.54	1483.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.39	30.99	24.10	75.	8.03	31.68	24.69
5.	8.38	31.01	24.11	80.	8.07	31.70	24.70
10.	8.25	31.07	24.18	85.	8.11	31.75	24.74
15.	8.17	31.19	24.29	90.	8.18	31.83	24.79
20.	8.21	31.24	24.32	95.	8.20	31.89	24.83
25.	8.25	31.24	24.31	100.	8.23	31.55	24.87
30.	8.11	31.28	24.37	105.	8.24	32.00	24.91
35.	7.92	31.30	24.41	110.	8.26	32.09	24.98
40.	7.84	31.32	24.43	115.	8.29	32.25	25.10
45.	7.89	31.41	24.50	120.	8.47	32.42	25.20
50.	7.90	31.44	24.52	125.	8.47	32.42	25.20
55.	7.90	31.46	24.53	130.	8.47	32.42	25.21
60.	7.90	31.49	24.56	135.	8.47	32.42	25.21
65.	7.93	31.51	24.58	140.	8.47	32.43	25.21

REFERENCE NO. 73- 7-140 STN- C DATE 20/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 9.0  
 RESULTS OF STD CAST 91 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA C	POT EN	SOUND VEL
0	7.90	31.40	24.49	345.0	0.0	0.0	1476.
10	7.87	31.42	24.51	344.1	0.34	0.02	1478.
20	7.87	31.42	24.51	343.9	0.69	0.07	1478.
30	7.87	31.42	24.51	344.1	1.02	0.16	1478.
50	8.04	31.67	24.68	328.2	1.70	0.43	1480.
75	8.10	31.78	24.76	320.7	2.52	0.95	1480.
100	8.28	32.17	25.04	294.8	3.29	1.64	1482.
125	8.60	32.69	25.39	261.4	3.99	2.44	1484.
150	8.73	33.21	25.79	224.8	4.59	3.28	1486.
175	8.48	33.50	26.05	200.2	5.12	4.15	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.90	31.40	24.49	90.	8.16	31.57	24.90
5.	7.88	31.40	24.49	95.	8.25	32.11	25.00
10.	7.87	31.42	24.51	100.	8.28	32.17	25.04
15.	7.87	31.42	24.51	105.	8.33	32.21	25.07
20.	7.87	31.42	24.51	110.	8.36	32.28	25.11
25.	7.87	31.37	24.47	115.	8.40	32.37	25.18
30.	7.85	31.41	24.50	120.	8.50	32.61	25.35
35.	7.92	31.46	24.53	125.	8.60	32.69	25.39
40.	7.99	31.59	24.63	130.	8.73	32.81	25.47
45.	8.02	31.62	24.64	135.	8.77	32.96	25.58
50.	8.04	31.67	24.68	140.	8.73	33.13	25.72
55.	8.06	31.69	24.69	145.	8.74	33.20	25.77
60.	8.06	31.70	24.70	150.	8.73	33.21	25.79
65.	8.06	31.70	24.70	155.	8.73	33.23	25.80
70.	8.07	31.74	24.73	160.	8.62	33.27	25.92
75.	8.10	31.78	24.76	165.	8.50	33.49	26.03
80.	8.11	31.79	24.77	170.	8.48	33.50	26.05
85.	8.13	31.87	24.82	175.	8.47	33.50	26.05



REFERENCE NO. 73-7-141 STN- D DATE 20/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 10.0  
 RESULTS OF STD CAST 67 POINTS TAKEN FROM ANALOG TRACE

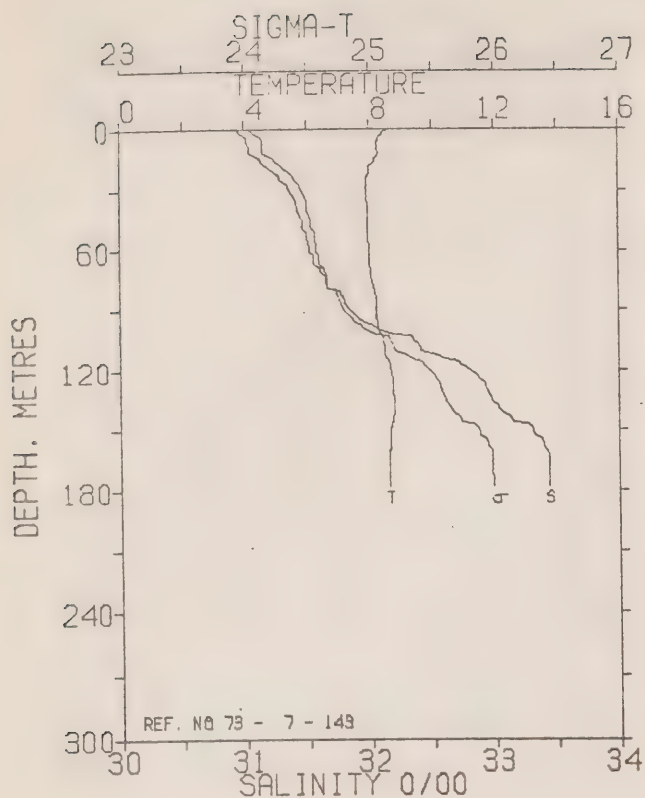
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT-EN	SOUND VEL
0	8.01	31.49	24.55	335.8	0.0	0.0	1478.
10	7.94	31.52	24.58	337.5	0.34	0.02	1478.
20	7.97	31.57	24.61	334.0	0.67	0.07	1479.
30	7.99	31.63	24.66	330.0	1.01	0.15	1479.
50	8.03	31.76	24.76	320.8	1.66	0.42	1480.
75	8.19	32.22	25.09	285.8	2.40	0.89	1481.
100	8.27	32.61	25.38	261.9	3.11	1.52	1482.
125	8.35	32.94	25.63	239.3	3.74	2.25	1484.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.01	31.49	24.55	75.	8.19	32.22	25.09
5.	7.93	31.51	24.57	80.	8.21	32.26	25.12
10.	7.94	31.52	24.58	85.	8.22	32.28	25.13
15.	7.97	31.56	24.61	90.	8.22	32.32	25.17
20.	7.97	31.57	24.61	95.	8.23	32.44	25.26
25.	7.97	31.62	24.65	100.	8.27	32.61	25.38
30.	7.99	31.63	24.66	105.	8.27	32.62	25.39
35.	7.99	31.64	24.67	110.	8.28	32.64	25.40
40.	8.00	31.67	24.69	115.	8.30	32.74	25.48
45.	8.02	31.72	24.72	120.	8.33	32.83	25.55
50.	8.03	31.76	24.76	125.	8.35	32.94	25.63
55.	8.12	31.99	24.92	130.	8.40	33.20	25.82
60.	8.15	32.13	25.02	135.	8.40	33.21	25.83
65.	8.17	32.18	25.06	140.	8.41	33.22	25.84

REFERENCE NO. 73-7-142 STN- A DATE 20/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 11.0  
 RESULTS OF STD CAST 121 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	PCT EN	SOUND VEL
0	7.96	31.42	24.50	344.4	0.0	0.0	1478.
10	7.84	31.47	24.55	339.7	0.34	0.02	1478.
20	7.90	31.52	24.58	336.8	0.68	0.07	1478.
30	7.91	31.55	24.61	334.9	1.02	0.15	1479.
50	8.04	31.69	24.69	326.8	1.68	0.43	1480.
75	8.12	31.92	24.87	310.6	2.48	0.93	1481.
100	8.31	32.17	25.03	295.3	3.23	1.60	1482.
125	8.60	32.56	25.29	271.1	3.94	2.41	1484.
150	8.73	33.07	25.68	235.3	4.56	3.29	1486.
175	8.77	33.23	25.79	224.5	5.14	4.25	1486.
200	8.43	33.53	26.08	197.8	5.68	5.27	1486.

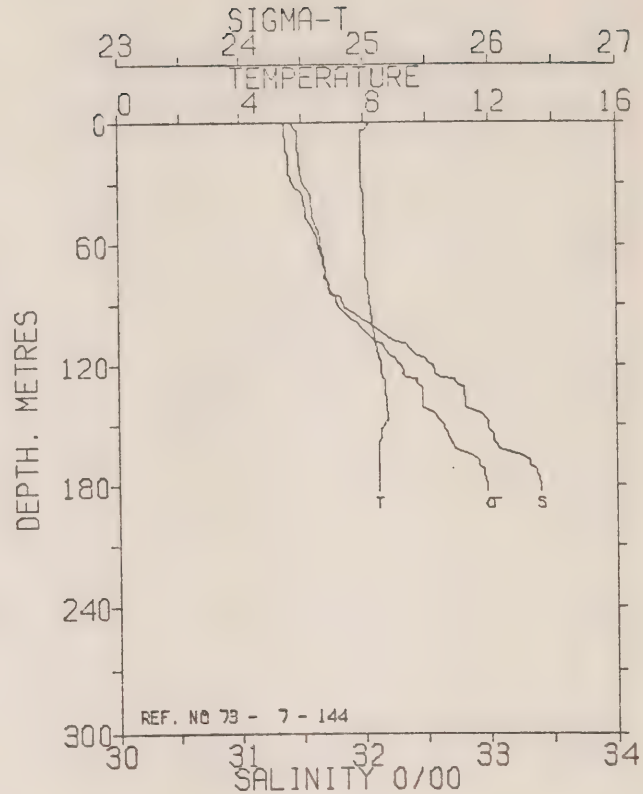
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.96	31.42	24.50	110.	8.47	32.35	25.15
5.	7.86	31.42	24.51	115.	8.52	32.41	25.19
10.	7.84	31.47	24.55	120.	8.58	32.49	25.24
15.	7.88	31.50	24.57	125.	8.60	32.56	25.29
20.	7.90	31.52	24.58	130.	8.56	32.76	25.45
25.	7.90	31.54	24.60	135.	8.60	32.83	25.50
30.	7.91	31.55	24.61	140.	8.61	32.88	25.54
35.	7.93	31.56	24.61	145.	8.68	33.00	25.63
40.	8.00	31.60	24.63	150.	8.73	33.07	25.68
45.	8.03	31.62	24.65	155.	8.75	33.09	25.69
50.	8.04	31.69	24.69	160.	8.77	33.10	25.69
55.	8.08	31.73	24.72	165.	8.77	33.11	25.70
60.	8.08	31.76	24.75	170.	8.77	33.16	25.74
65.	8.06	31.83	24.81	175.	8.77	33.23	25.79
70.	8.08	31.90	24.86	180.	8.75	33.24	25.80
75.	8.12	31.92	24.87	185.	8.68	33.29	25.86
80.	8.18	32.02	24.94	190.	8.57	33.40	25.96
85.	8.26	32.05	24.95	195.	8.52	33.45	26.00
90.	8.29	32.09	24.98	200.	8.43	33.53	26.08
95.	8.29	32.13	25.00	205.	8.41	33.54	26.09
100.	8.31	32.17	25.03	210.	8.40	33.54	26.09
105.	8.39	32.24	25.08	215.	8.39	33.54	26.09



REFERENCE NO. 73-7-143 STN- B DATE 20/ 3/73  
 POSITION 48-17.0N, 124-12.0W PST 12.1  
 RESULTS OF STD CAST 90 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.53	30.94	24.04	387.9	0.0	0.0	1480.
10	8.27	31.03	24.15	378.2	0.38	0.02	1479.
20	7.98	31.22	24.34	360.2	0.75	0.08	1478.
30	7.91	31.36	24.46	349.1	1.10	0.17	1478.
50	7.95	31.48	24.55	340.6	1.79	0.45	1479.
75	8.08	31.65	24.66	330.6	2.64	0.58	1480.
100	8.28	32.09	24.98	300.5	3.43	1.69	1482.
125	8.72	32.90	25.54	247.4	4.11	2.46	1485.
150	8.64	33.30	25.87	216.7	4.70	3.29	1486.
175	8.58	33.44	25.99	206.2	5.22	4.15	1486.

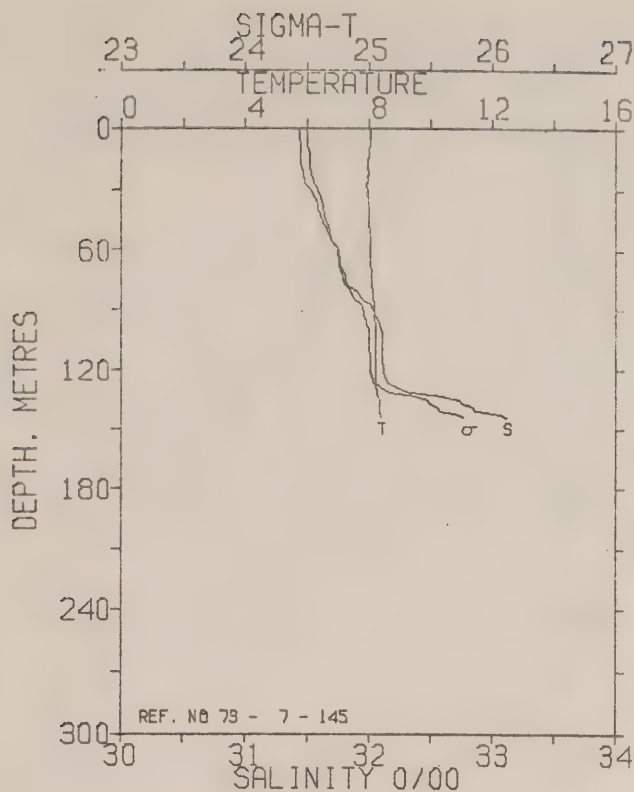
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.53	30.94	24.04	90.	8.19	31.83	24.79
5.	8.27	31.02	24.14	95.	8.22	31.54	24.87
10.	8.27	31.03	24.15	100.	8.28	32.09	24.98
15.	8.13	31.13	24.24	105.	8.43	32.35	25.16
20.	7.98	31.22	24.34	110.	8.47	32.41	25.20
25.	7.92	31.29	24.40	115.	8.59	32.71	25.41
30.	7.91	31.36	24.46	120.	8.66	32.80	25.48
35.	7.93	31.41	24.49	125.	8.72	32.90	25.54
40.	7.95	31.42	24.50	130.	8.73	32.94	25.57
45.	7.95	31.46	24.53	135.	8.74	32.98	25.60
50.	7.95	31.48	24.55	140.	8.75	33.06	25.66
55.	7.96	31.50	24.56	145.	8.71	33.14	25.73
60.	7.97	31.52	24.57	150.	8.64	33.30	25.87
65.	7.99	31.55	24.59	155.	8.61	33.38	25.94
70.	8.02	31.60	24.63	160.	8.59	33.42	25.97
75.	8.08	31.65	24.66	165.	8.58	33.43	25.98
80.	8.17	31.76	24.74	170.	8.58	33.41	25.96
85.	8.18	31.79	24.75	175.	8.58	33.44	25.99



REFERENCE NO. 73-7-144 STN- C DATE 20/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 13.1  
 RESULTS OF STD CAST 83 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.16	31.35	24.42	352.3	0.0	0.0	1479.
10	7.92	31.37	24.47	348.0	0.35	0.02	1478.
20	7.89	31.39	24.48	346.4	0.70	0.07	1478.
30	7.89	31.42	24.51	344.4	1.04	0.16	1478.
50	8.00	31.57	24.61	335.0	1.72	0.44	1479.
75	8.06	31.68	24.69	327.7	2.55	0.56	1480.
100	8.28	32.06	24.95	302.8	3.34	1.67	1482.
125	8.58	32.59	25.32	268.5	4.05	2.48	1484.
150	8.62	32.99	25.63	239.4	4.68	3.36	1485.
175	8.44	33.38	25.96	208.6	5.24	4.29	1485.

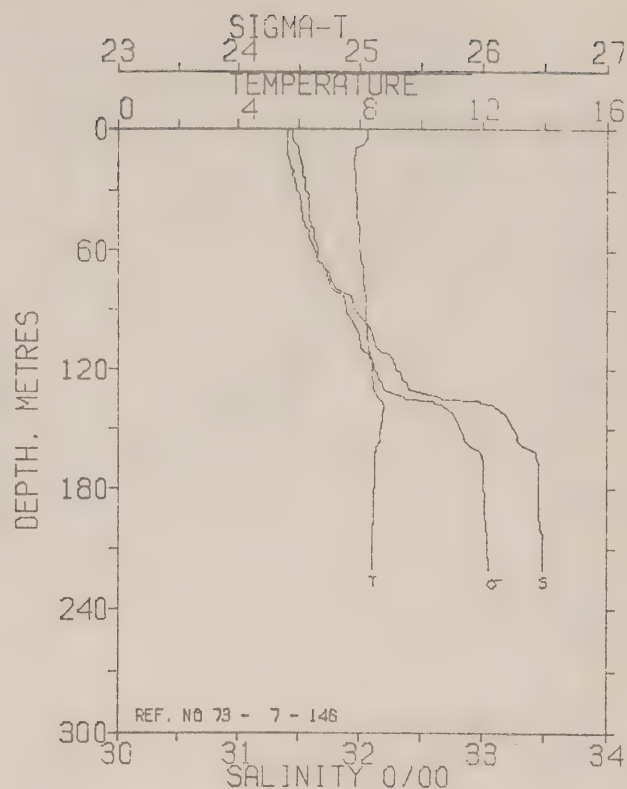
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.16	31.35	24.42	95.	8.22	31.44	24.87
5.	7.91	31.36	24.46	100.	8.28	32.06	24.95
10.	7.92	31.37	24.47	105.	8.32	32.18	25.04
15.	7.90	31.38	24.48	110.	8.38	32.24	25.16
20.	7.89	31.39	24.48	115.	8.46	32.43	25.21
25.	7.89	31.39	24.48	120.	8.54	32.55	25.29
30.	7.89	31.42	24.51	125.	8.58	32.59	25.32
35.	7.96	31.50	24.56	130.	8.69	32.76	25.43
40.	7.97	31.52	24.57	135.	8.71	32.80	25.47
45.	7.98	31.53	24.58	140.	8.72	32.76	25.43
50.	8.00	31.57	24.61	145.	8.78	32.94	25.57
55.	8.02	31.61	24.64	150.	8.62	32.59	25.63
60.	8.03	31.63	24.65	155.	8.57	32.03	25.67
65.	8.05	31.65	24.67	160.	8.45	33.06	25.71
70.	8.06	31.66	24.67	165.	8.44	33.25	25.86
75.	8.06	31.68	24.69	170.	8.44	33.32	25.91
80.	8.10	31.72	24.71	175.	8.44	33.38	25.96
85.	8.14	31.77	24.75	180.	8.45	33.40	25.98



REFERENCE NO. 73- 7-145 STN- D DATE 20/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 14.1  
 RESULTS OF STD CAST 77 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.04	31.42	24.49	345.4	0.0	0.0	1478.
10	8.01	31.44	24.51	344.0	0.34	0.02	1478.
20	7.96	31.45	24.52	342.8	0.69	0.07	1478.
30	7.95	31.53	24.58	336.9	1.03	0.16	1479.
50	8.02	31.65	24.67	328.9	1.69	0.43	1479.
75	8.07	31.80	24.78	318.9	2.50	0.64	1480.
100	8.18	32.10	24.99	298.9	3.27	1.63	1481.
125	8.19	32.14	25.03	296.2	4.01	2.48	1482.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.04	31.42	24.49	75.	8.07	31.80	24.78
5.	8.04	31.43	24.50	80.	8.10	31.88	24.84
10.	8.01	31.44	24.51	85.	8.15	31.96	24.89
15.	7.96	31.44	24.51	90.	8.17	32.03	24.95
20.	7.96	31.43	24.52	95.	8.17	32.07	24.98
25.	7.95	31.48	24.55	100.	8.18	32.10	24.99
30.	7.95	31.53	24.58	105.	8.18	32.10	25.00
35.	7.97	31.57	24.61	110.	8.18	32.11	25.01
40.	7.98	31.59	24.62	115.	8.18	32.10	24.99
45.	8.00	31.62	24.65	120.	8.19	32.14	25.03
50.	8.02	31.65	24.67	125.	8.19	32.14	25.03
55.	8.04	31.69	24.69	130.	8.22	32.26	25.12
60.	8.06	31.76	24.74	135.	8.32	32.74	25.47
65.	8.06	31.76	24.75	140.	8.33	32.86	25.57



REFERENCE NO. 73- 7-146 STN- A DATE 20/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 15.1  
 RESULTS OF STD CAST 93 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.23	31.40	24.45	349.5	0.0	0.0	1479.
10	7.87	31.40	24.50	345.2	0.35	0.02	1478.
20	7.85	31.45	24.54	341.3	0.69	0.07	1478.
30	7.87	31.48	24.56	339.5	1.03	0.16	1478.
50	7.98	31.58	24.62	332.7	1.71	0.43	1479.
75	8.13	31.76	24.74	322.7	2.53	0.56	1480.
100	8.26	32.09	24.98	300.4	3.31	1.65	1482.
125	8.42	32.35	25.16	284.1	4.04	2.48	1483.
150	8.70	33.25	25.82	221.3	4.66	3.35	1486.
175	8.49	33.45	26.01	204.1	5.18	4.22	1486.
200	8.43	33.48	26.04	201.8	5.69	5.19	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.23	31.40	24.45	110.	8.30	32.17	25.03
5.	8.21	31.40	24.45	115.	8.40	32.28	25.11
10.	7.87	31.40	24.50	120.	8.41	32.20	25.12
15.	7.84	31.42	24.51	125.	8.42	32.25	25.16
20.	7.85	31.45	24.54	130.	8.45	32.41	25.20
25.	7.87	31.47	24.55	135.	8.66	32.68	25.38
30.	7.87	31.48	24.56	140.	8.78	33.13	25.71
35.	7.90	31.51	24.58	145.	8.75	33.21	25.78
40.	7.92	31.52	24.58	150.	8.70	33.25	25.82
45.	7.94	31.53	24.58	155.	8.68	33.28	25.85
50.	7.98	31.58	24.62	160.	8.53	33.37	25.94
55.	8.00	31.59	24.63	165.	8.49	33.44	26.00
60.	8.03	31.63	24.65	170.	8.49	33.45	26.01
65.	8.05	31.64	24.66	175.	8.49	33.45	26.01
70.	8.10	31.72	24.71	180.	8.48	33.45	26.01
75.	8.13	31.76	24.74	185.	8.47	33.46	26.02
80.	8.17	31.84	24.80	190.	8.50	33.46	26.01
85.	8.19	31.94	24.87	195.	8.45	33.46	26.02
90.	8.20	31.96	24.89	200.	8.43	33.48	26.04
95.	8.22	32.03	24.94	205.	8.43	33.49	26.05
100.	8.26	32.09	24.98	210.	8.43	33.49	26.05

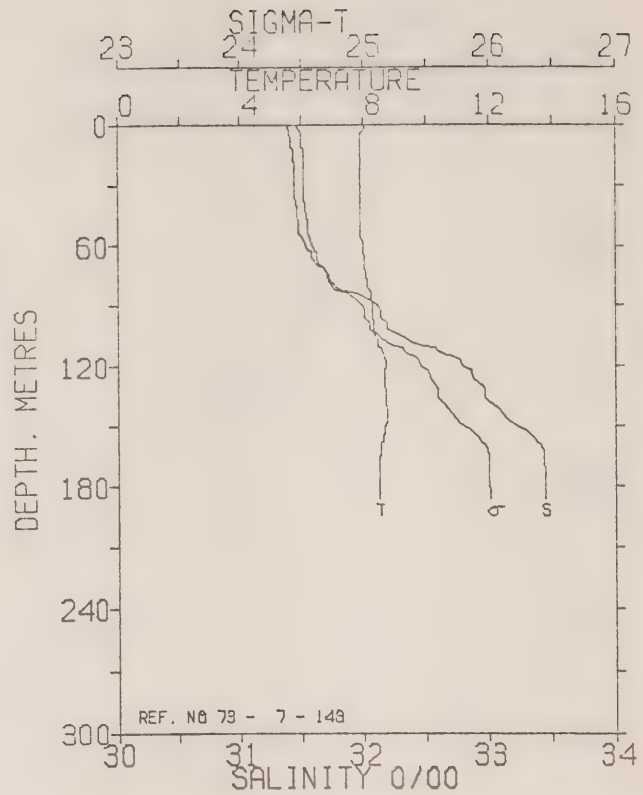




REFERENCE NO. 73- 7-147 STN- B DATE 20/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 16.0  
 RESULTS OF STD CAST 72 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.93	30.74	23.83	408.5	0.0	0.0	1481.0
10	8.62	30.82	23.93	398.7	0.41	0.02	1480.0
20	8.24	31.06	24.18	375.7	0.79	0.08	1479.0
30	7.95	31.23	24.35	359.4	1.16	0.17	1478.0
50	7.87	31.39	24.48	346.8	1.87	0.46	1479.0
75	7.97	31.54	24.59	336.8	2.72	1.00	1480.0
100	8.22	31.98	24.90	308.0	3.53	1.73	1481.0
125	8.42	32.39	25.19	281.1	4.27	2.57	1483.0
150	8.59	33.36	25.92	211.5	4.89	3.44	1485.0

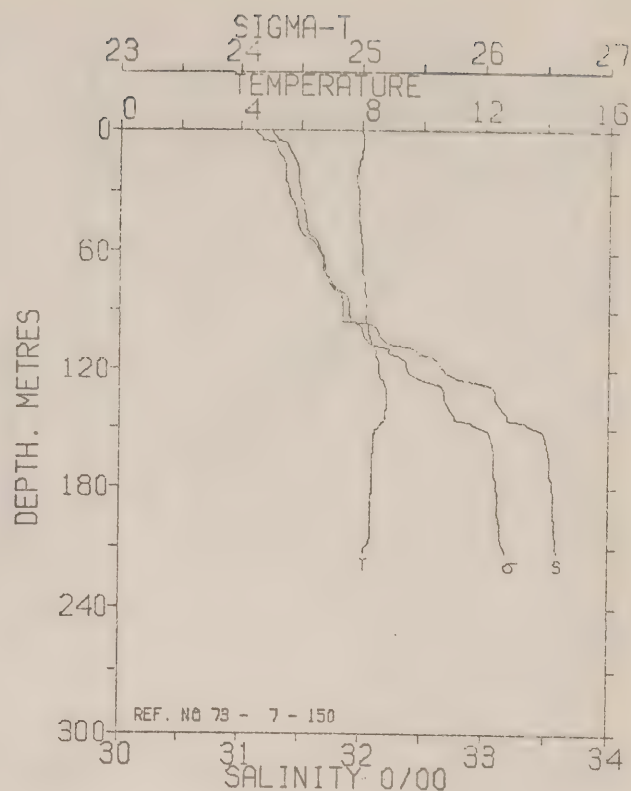
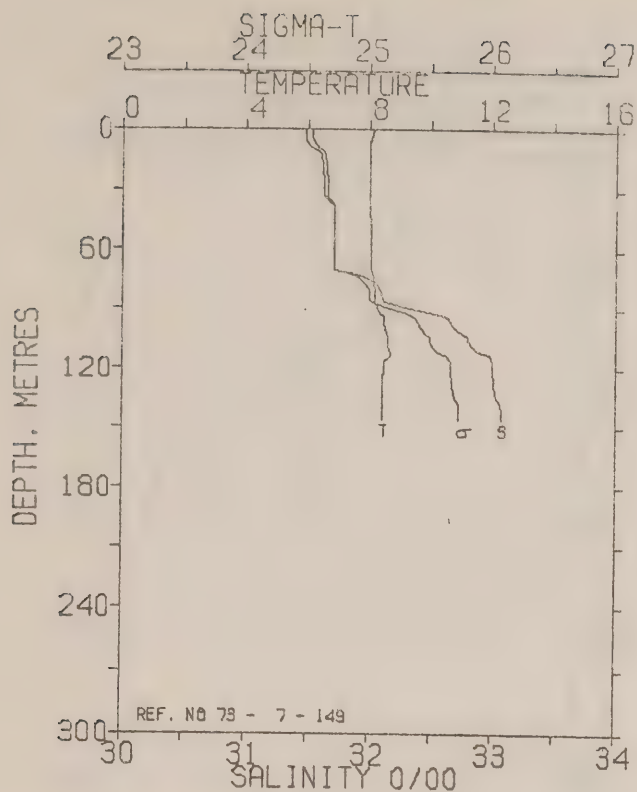
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.93	30.74	23.83	80.	8.05	31.66	24.67
5.	8.83	30.74	23.84	85.	8.06	31.71	24.71
10.	8.62	30.82	23.93	90.	8.08	31.73	24.72
15.	8.51	30.91	24.02	95.	8.11	31.80	24.77
20.	8.24	31.06	24.18	100.	8.22	31.98	24.90
25.	8.05	31.18	24.30	105.	8.28	32.09	24.98
30.	7.95	31.23	24.35	110.	8.30	32.13	25.00
35.	7.91	31.27	24.39	115.	8.33	32.19	25.05
40.	7.88	31.30	24.41	120.	8.35	32.33	25.15
45.	7.87	31.33	24.44	125.	8.42	32.39	25.19
50.	7.87	31.39	24.48	130.	8.45	32.48	25.25
55.	7.90	31.44	24.52	135.	8.50	32.63	25.37
60.	7.91	31.45	24.53	140.	8.59	32.96	25.61
65.	7.92	31.48	24.55	145.	8.61	33.23	25.82
70.	7.94	31.50	24.56	150.	8.59	33.36	25.92
75.	7.97	31.54	24.59	155.	8.59	33.39	25.95



REFERENCE NO. 73- 7-148 STN- C DATE 20/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 17.0  
 RESULTS OF STD CAST 74 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.05	31.38	24.46	348.6	0.0	0.0	1478.0
10	7.90	31.41	24.50	344.7	0.35	0.02	1478.0
20	7.90	31.44	24.52	342.8	0.69	0.07	1478.0
30	7.91	31.44	24.52	343.1	1.03	0.16	1478.0
50	7.93	31.48	24.55	340.9	1.72	0.44	1479.0
75	8.08	31.72	24.71	325.3	2.55	0.97	1480.0
100	8.32	32.19	25.05	293.8	3.32	1.65	1482.0
125	8.67	32.87	25.53	248.8	4.00	2.42	1485.0
150	8.71	33.22	25.80	223.9	4.55	3.26	1486.0
175	8.50	33.45	26.00	204.6	5.11	4.12	1486.0

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.05	31.38	24.46	90.	8.29	32.12	25.00
5.	8.05	31.38	24.46	95.	8.30	32.13	25.01
10.	7.91	31.41	24.49	100.	8.32	32.19	25.05
15.	7.90	31.41	24.50	105.	8.39	32.30	25.12
20.	7.90	31.43	24.51	110.	8.47	32.48	25.25
25.	7.90	31.44	24.52	115.	8.68	32.73	25.41
30.	7.90	31.41	24.50	120.	8.71	32.79	25.46
35.	7.88	31.42	24.51	125.	8.67	32.87	25.53
40.	7.93	31.43	24.51	130.	8.68	32.85	25.59
45.	7.93	31.46	24.55	135.	8.72	32.87	25.59
50.	7.93	31.30	24.41	140.	8.74	33.06	25.66
55.	7.88	31.45	24.53	145.	8.74	33.13	25.72
60.	7.93	31.52	24.58	150.	8.71	33.22	25.80
65.	7.98	31.54	24.59	155.	8.64	33.35	25.91
70.	8.01	31.58	24.62	160.	8.54	33.41	25.97
75.	8.03	31.62	24.65	165.	8.51	33.44	26.00
80.	8.08	31.72	24.71	170.	8.50	33.44	26.00



REFERENCE NO. 73-7-149 STN- D DATE 20/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 18.0  
 RESULTS OF STD CAST 53 POINTS TAKEN FROM ANALOG TRACE

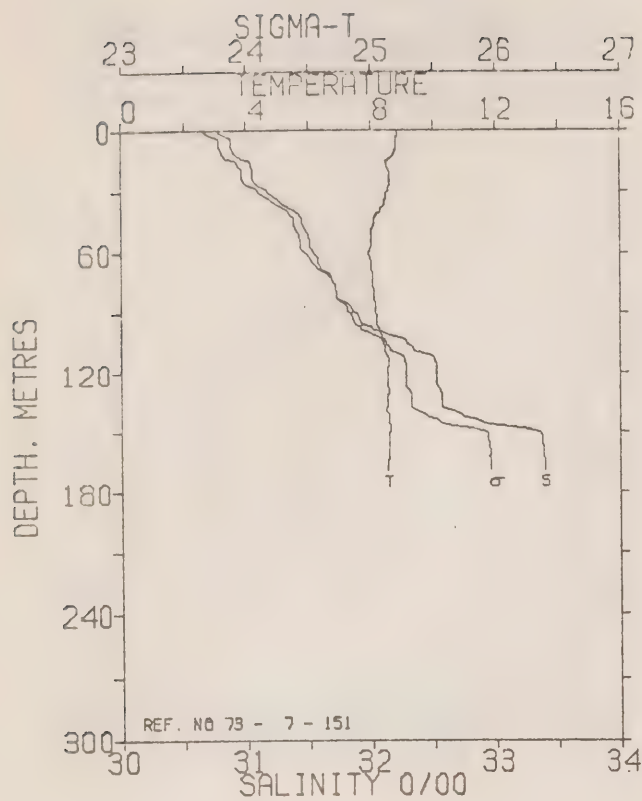
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	8.10	31.47	24.52	342.5	0.0	0.0	1479.
10	7.97	31.55	24.60	335.3	0.34	0.02	1478.
20	7.98	31.61	24.65	330.9	0.67	0.07	1479.
30	7.98	31.62	24.65	330.7	1.00	0.15	1479.
50	8.02	31.71	24.71	324.9	1.66	0.42	1480.
75	8.12	31.99	24.92	305.5	2.46	0.93	1481.
100	8.51	32.70	25.42	258.8	3.17	1.56	1484.
125	8.42	33.01	25.67	235.0	3.79	2.26	1484.

REFERENCE NO. 73-7-150 STN- A DATE 20/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 19.0  
 RESULTS OF STD CAST 104 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	8.00	31.12	24.26	367.3	0.0	0.0	1478.
10	8.00	31.31	24.40	353.9	0.36	0.02	1478.
20	7.85	31.37	24.47	347.3	0.71	0.07	1478.
30	7.88	31.40	24.49	345.7	1.06	0.16	1478.
50	7.95	31.51	24.57	338.9	1.74	0.44	1479.
75	8.10	31.76	24.74	322.7	2.57	0.56	1480.
100	8.27	32.13	25.01	297.4	3.35	1.66	1482.
125	8.71	32.81	25.47	254.2	4.03	2.45	1485.
150	8.55	33.41	25.97	207.3	4.61	3.25	1485.
175	8.37	33.54	26.10	195.6	5.11	4.07	1485.
200	8.32	33.58	26.13	192.5	5.56	5.00	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.10	31.47	24.52	75.	8.13	32.07	24.98
5.	8.03	31.48	24.54	80.	8.17	22.05	24.96
10.	7.97	31.55	24.60	85.	8.05	31.94	24.89
15.	7.98	31.61	24.64	90.	8.27	32.33	25.17
20.	7.98	31.61	24.65	95.	8.46	32.64	25.38
25.	7.98	31.62	24.65	100.	8.51	32.70	25.42
30.	7.98	31.62	24.65	105.	8.59	32.80	25.48
35.	8.00	31.65	24.67	110.	8.62	32.66	25.53
40.	8.01	31.71	24.72	115.	8.51	32.99	25.64
45.	8.02	31.71	24.71	120.	8.46	33.00	25.66
50.	6.66	28.56	22.42	125.	8.42	33.01	25.67
55.	7.88	30.92	24.12	130.	8.42	33.01	25.68
60.	7.97	31.57	24.61	135.	8.42	33.04	25.69
65.	8.10	31.89	24.84	140.	8.42	33.07	25.72
70.	8.15	32.06	24.97	145.	8.42	33.07	25.72

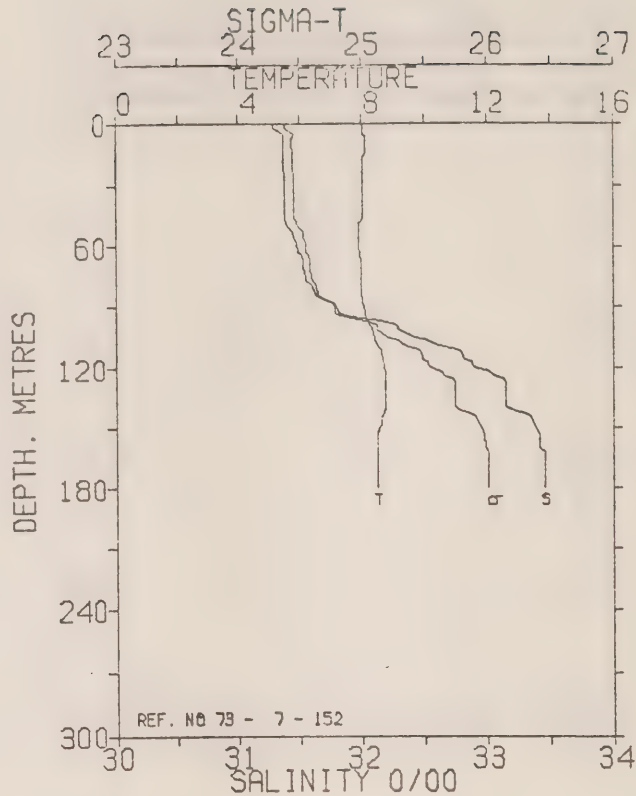
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.00	31.12	24.26	110.	8.52	32.46	25.23
5.	8.04	31.18	24.30	115.	8.56	32.62	25.35
10.	8.00	31.21	24.40	120.	8.59	32.68	25.39
15.	7.91	31.35	24.45	125.	8.71	32.81	25.47
20.	7.85	31.37	24.47	130.	8.83	33.09	25.67
25.	7.84	31.37	24.47	135.	8.82	33.10	25.68
30.	7.89	31.40	24.49	140.	8.81	33.15	25.72
35.	7.93	31.44	24.52	145.	8.79	33.19	25.76
40.	7.94	31.46	24.52	150.	8.55	33.41	25.97
45.	7.94	31.48	24.54	155.	8.42	33.50	26.06
50.	7.95	31.51	24.57	160.	8.40	32.52	26.07
55.	8.01	31.61	24.64	165.	8.38	32.53	26.09
60.	8.05	31.66	24.67	170.	8.38	32.53	26.09
65.	8.06	31.68	24.69	175.	8.37	32.54	26.10
70.	8.06	31.69	24.70	180.	8.37	32.55	26.11
75.	8.10	31.76	24.74	185.	8.36	32.56	26.11
80.	8.14	31.85	24.81	190.	8.35	32.57	26.12
85.	8.16	31.90	24.84	195.	8.34	32.57	26.13
90.	8.17	31.90	24.84	200.	8.22	33.58	26.13
95.	8.17	31.91	24.85	205.	8.31	33.59	26.14
100.	8.27	32.13	25.01	210.	8.11	33.59	26.17



REFERENCE NO. 73- 7-151 STN- B DATE 20/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 20.0  
 RESULTS OF STD CAST 94 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.85	30.65	23.77	414.0	0.0	0.0	1481.0
10	8.76	30.79	23.89	402.8	0.41	0.02	1481.0
20	8.57	30.97	24.05	387.4	0.80	0.08	1480.0
30	8.50	31.10	24.17	376.7	1.18	0.18	1480.0
50	7.99	31.41	24.49	346.5	1.90	0.47	1479.0
75	8.06	31.70	24.70	326.4	2.75	1.01	1480.0
100	8.30	32.12	24.99	299.1	3.54	1.71	1482.0
125	8.51	32.52	25.28	272.7	4.24	2.51	1484.0
150	8.54	33.35	25.92	211.5	4.88	3.41	1485.0

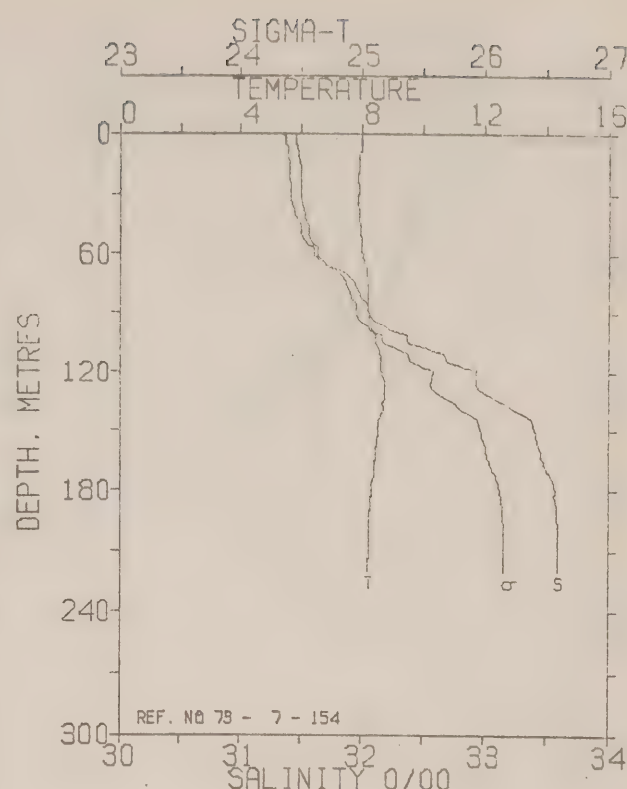
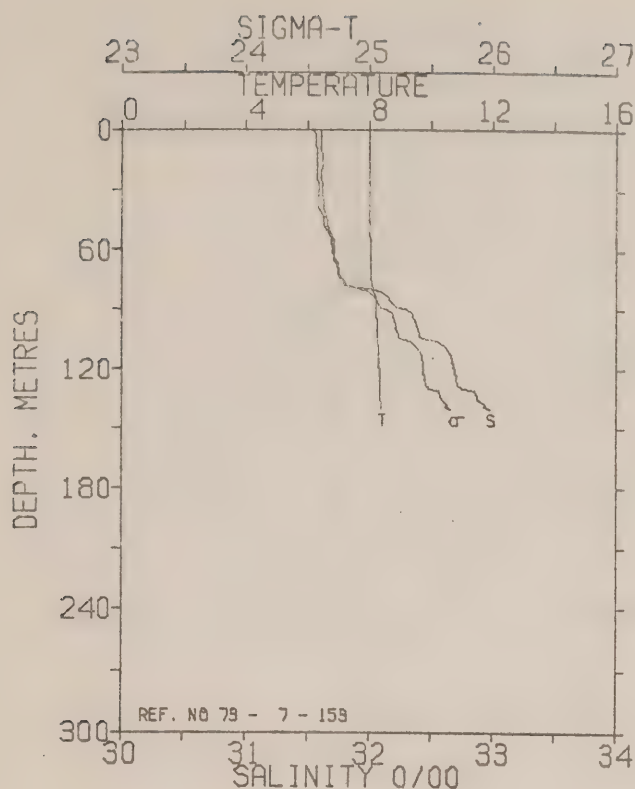
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.85	30.65	23.77	85.	8.11	31.81	24.78
5.	8.81	30.78	23.88	90.	8.15	31.88	24.83
10.	8.76	30.79	23.89	95.	8.17	31.93	24.86
15.	8.47	30.91	24.03	100.	8.30	32.12	24.99
20.	8.57	30.97	24.05	105.	8.38	32.29	25.12
25.	8.60	30.98	24.06	110.	8.47	32.44	25.22
30.	8.50	31.10	24.17	115.	8.52	32.51	25.27
35.	8.42	31.21	24.27	120.	8.52	32.52	25.27
40.	8.23	31.34	24.34	125.	8.51	32.52	25.28
45.	8.07	31.38	24.45	130.	8.52	32.56	25.31
50.	7.99	31.41	24.49	135.	8.50	32.57	25.31
55.	7.96	31.44	24.51	140.	8.52	32.72	25.43
60.	7.92	31.47	24.54	145.	8.57	32.90	25.57
65.	7.98	31.53	24.58	150.	8.54	33.35	25.92
70.	8.01	31.64	24.66	155.	8.52	33.38	25.94
75.	8.06	31.70	24.70	160.	8.52	33.38	25.95
80.	8.08	31.72	24.72	165.	8.51	33.39	25.96



REFERENCE NO. 73- 7-152 STN- C DATE 20/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 21.0  
 RESULTS OF STD CAST 78 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.03	31.28	24.38	355.7	0.0	0.0	1478.0
10	8.13	31.37	24.44	350.8	0.35	0.02	1479.0
20	8.06	31.37	24.45	349.9	0.70	0.07	1479.0
30	8.06	31.38	24.45	349.5	1.05	0.16	1479.0
50	7.91	31.40	24.49	346.3	1.75	0.45	1479.0
75	7.98	31.55	24.59	336.6	2.60	0.59	1480.0
100	8.34	32.29	25.12	286.8	3.40	1.70	1482.0
125	8.74	33.13	25.72	230.9	4.05	2.44	1485.0
150	8.54	33.39	25.95	209.0	4.61	3.22	1485.0
175	8.50	33.46	26.01	203.5	5.12	4.07	1486.0

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.03	31.28	24.38	90.	8.09	31.60	24.78
5.	8.03	31.37	24.45	95.	8.15	32.00	24.93
10.	8.13	31.37	24.44	100.	8.34	32.29	25.12
15.	8.08	31.37	24.44	105.	8.41	32.42	25.21
20.	8.06	31.37	24.45	110.	8.57	32.69	25.40
25.	8.07	31.38	24.45	115.	8.65	32.81	25.49
30.	8.04	31.38	24.45	120.	8.72	32.91	25.55
35.	8.06	31.38	24.45	125.	8.74	33.13	25.72
40.	8.05	31.38	24.45	130.	8.74	33.16	25.74
45.	8.04	31.38	24.45	135.	8.76	33.06	25.66
50.	7.91	31.40	24.49	140.	8.76	33.16	25.74
55.	7.91	31.45	24.53	145.	8.61	33.35	25.91
60.	7.92	31.48	24.55	150.	8.54	33.29	25.95
65.	7.94	31.52	24.58	155.	8.50	33.41	25.98
70.	7.97	31.53	24.58	160.	8.50	33.42	25.98
75.	7.98	31.55	24.59	165.	8.50	33.46	26.01
80.	8.01	31.60	24.63	170.	8.50	33.46	26.01



REFERENCE NO. 73-7-153 STN- D DATE 20/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 22.0  
 RESULTS OF STD CAST 55 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.99	31.55	24.60	335.0	0.0	0.0	1478.
10	7.99	31.57	24.61	334.6	0.33	0.02	1479.
20	8.00	31.57	24.61	334.4	0.67	0.07	1479.
30	8.00	31.58	24.62	333.9	1.00	0.15	1479.
50	8.01	31.65	24.67	329.3	1.67	0.42	1479.
75	8.06	31.80	24.78	318.7	2.48	0.94	1480.
100	8.24	32.39	25.22	277.9	3.21	1.59	1482.
125	8.31	32.70	25.45	256.5	3.87	2.34	1483.

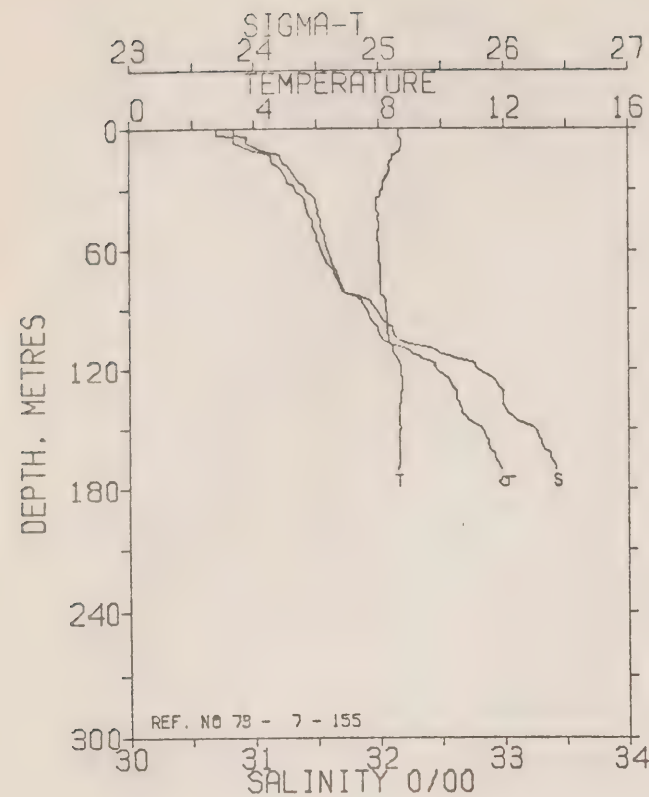
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.99	31.55	24.60	75.	8.06	31.80	24.78
5.	7.99	31.56	24.60	80.	8.13	32.04	24.96
10.	7.99	31.57	24.61	85.	8.19	32.16	25.05
15.	8.00	31.57	24.61	90.	8.22	32.29	25.14
20.	8.00	31.55	24.60	95.	8.23	32.37	25.20
25.	8.00	31.58	24.62	100.	8.24	32.39	25.22
30.	8.00	31.58	24.62	105.	8.25	32.46	25.27
35.	7.99	31.59	24.62	110.	8.29	32.63	25.40
40.	7.99	31.59	24.63	115.	8.29	32.66	25.42
45.	8.00	31.62	24.65	120.	8.30	32.68	25.44
50.	8.01	31.65	24.67	125.	8.31	32.70	25.45
55.	8.03	31.70	24.70	130.	8.32	32.75	25.48
60.	8.03	31.70	24.71	135.	8.34	32.88	25.58
65.	8.03	31.71	24.72	140.	8.37	32.98	25.65

REFERENCE NO. 73-7-154 STN- A DATE 20/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 23.0  
 RESULTS OF STD CAST 97 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.98	31.36	24.45	349.1	0.0	0.0	1478.
10	7.93	31.39	24.48	346.6	0.35	0.02	1478.
20	7.88	31.40	24.49	345.4	0.69	0.07	1478.
30	7.87	31.41	24.50	344.8	1.04	0.16	1478.
50	7.96	31.50	24.56	339.2	1.72	0.44	1479.
75	8.19	31.94	24.87	310.3	2.54	0.56	1481.
100	8.43	32.31	25.13	286.5	3.30	1.63	1483.
125	8.74	32.94	25.57	245.0	3.95	2.38	1485.
150	8.53	33.40	25.97	207.7	4.52	3.17	1485.
175	8.35	33.55	26.11	194.6	5.02	4.00	1485.
200	8.24	33.59	26.16	190.3	5.50	4.92	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.98	31.36	24.45	105.	8.48	32.39	25.18
5.	7.99	31.37	24.46	110.	8.60	32.47	25.38
10.	7.93	31.39	24.48	115.	8.63	32.73	25.42
15.	7.91	31.40	24.49	120.	8.66	32.44	25.58
20.	7.88	31.40	24.49	125.	8.74	32.94	25.57
25.	7.88	31.41	24.50	130.	8.78	32.99	25.60
30.	7.87	31.41	24.50	135.	8.70	33.16	25.75
35.	7.87	31.42	24.51	140.	8.67	33.27	25.84
40.	7.90	31.44	24.53	145.	8.56	33.38	25.95
45.	7.93	31.49	24.55	150.	8.53	33.40	25.97
50.	7.96	31.50	24.56	155.	8.50	33.43	25.99
55.	7.97	31.55	24.59	160.	8.47	33.45	26.01
60.	8.02	31.61	24.63	165.	8.43	33.48	26.04
65.	8.09	31.70	24.70	170.	8.42	33.50	26.06
70.	8.16	31.86	24.82	175.	8.35	33.55	26.11
75.	8.19	31.94	24.87	180.	8.32	33.57	26.13
80.	8.22	31.99	24.90	185.	8.29	32.58	26.14
85.	8.23	32.04	24.95	190.	8.27	33.59	26.15
90.	8.23	32.06	24.96	195.	8.24	33.59	26.15
95.	8.27	32.14	25.01	200.	8.22	33.60	26.16

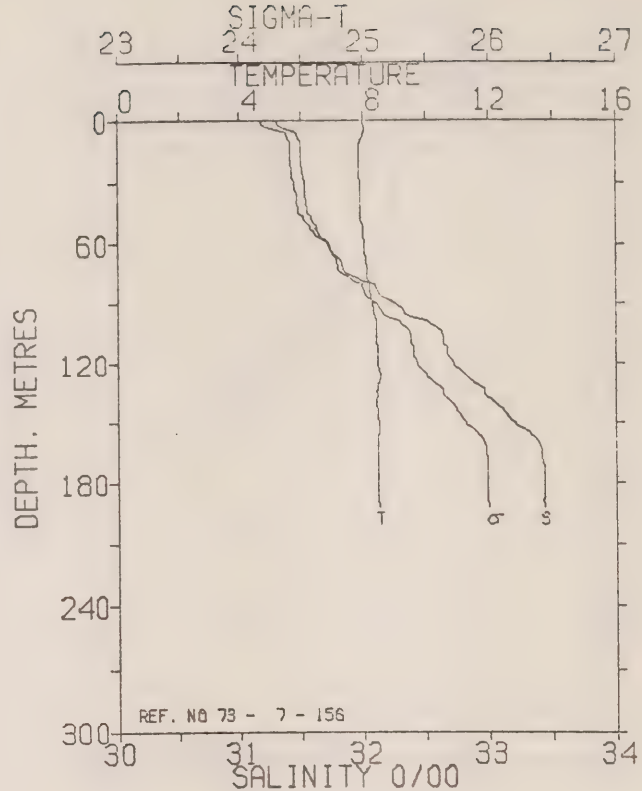




REFERENCE NO. 73- 7-155 STN- B DATE 21/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 0.1  
 RESULTS OF STD CAST 106 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.61	30.69	23.84	407.7	0.0	0.0	1480.
10	8.67	30.95	24.03	389.6	0.40	0.02	1480.
20	8.31	31.21	24.28	265.6	0.77	0.08	1480.
30	8.08	31.33	24.41	353.6	1.13	0.17	1479.
50	7.95	31.48	24.54	341.2	1.82	0.45	1479.
75	8.06	31.67	24.68	328.5	2.66	0.98	1480.
100	8.28	32.10	24.98	300.0	3.45	1.68	1482.
125	8.72	32.92	25.56	246.1	4.13	2.46	1485.
150	8.65	33.24	25.82	221.3	4.72	3.29	1486.

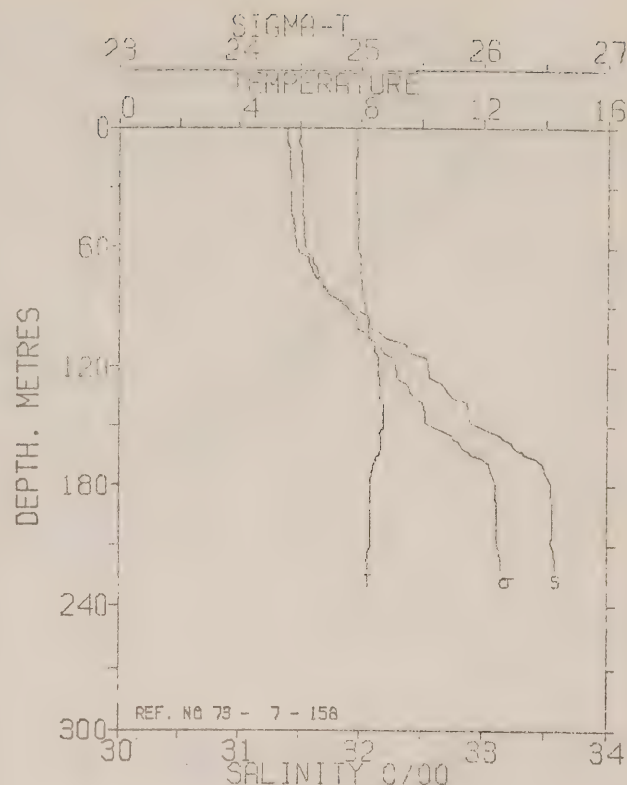
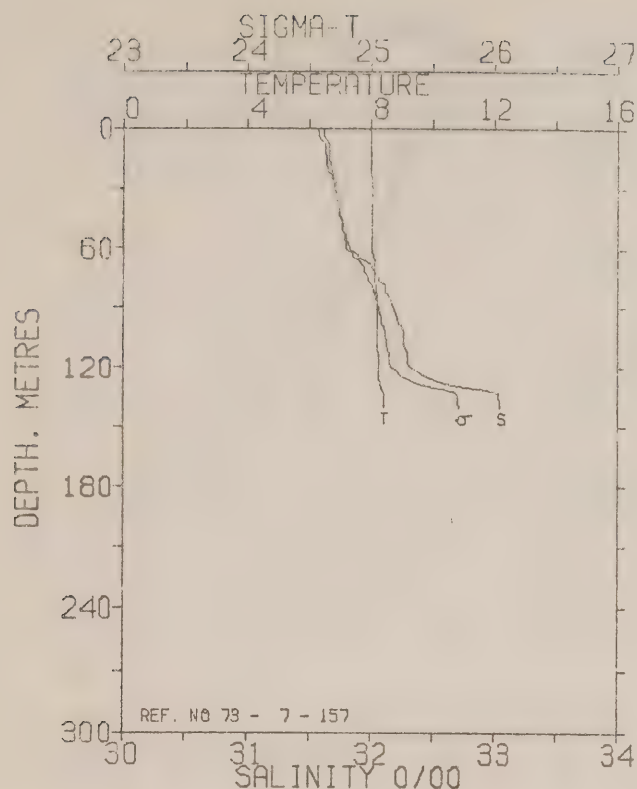
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.61	30.69	23.84	90.	8.23	31.58	24.90
5.	8.70	30.83	23.93	95.	8.26	32.03	24.93
10.	8.67	30.95	24.03	100.	8.28	32.10	24.98
15.	8.40	31.13	24.21	105.	8.29	32.16	25.03
20.	8.31	31.21	24.28	110.	8.43	32.46	25.24
25.	8.17	31.25	24.34	115.	8.60	32.69	25.40
30.	8.08	31.33	24.41	120.	8.67	32.79	25.46
35.	7.91	31.40	24.49	125.	8.72	32.52	25.56
40.	7.92	31.42	24.50	130.	8.71	32.57	25.60
45.	7.95	31.47	24.54	135.	8.67	32.99	25.62
50.	7.95	31.48	24.54	140.	8.60	33.02	25.65
55.	7.95	31.50	24.56	145.	8.60	33.09	25.71
60.	7.97	31.53	24.58	150.	8.65	33.24	25.82
65.	7.99	31.57	24.61	155.	8.62	33.29	25.87
70.	8.03	31.63	24.65	160.	8.61	33.32	25.89
75.	8.06	31.67	24.68	165.	8.61	33.38	25.93
80.	8.07	31.70	24.70	170.	8.58	33.42	25.97



REFERENCE NO. 73- 7-156 STN- C DATE 21/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 1.1  
 RESULTS OF STD CAST 96 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.00	31.17	24.30	363.6	0.0	0.0	1478.
10	7.89	31.40	24.49	345.4	0.35	0.02	1478.
20	7.88	31.41	24.50	344.7	0.70	0.07	1478.
30	7.89	31.45	24.53	342.1	1.04	0.16	1478.
50	7.95	31.56	24.61	335.2	1.72	0.44	1479.
75	8.10	31.87	24.83	314.0	2.53	0.65	1480.
100	8.42	32.53	25.30	269.7	3.27	1.60	1483.
125	8.53	32.80	25.50	251.9	3.92	2.25	1484.
150	8.51	33.21	25.82	221.5	4.51	3.17	1485.
175	8.48	33.43	25.99	205.4	5.03	4.04	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.00	31.17	24.30	95.	8.34	32.33	25.16
5.	8.01	31.32	24.41	100.	8.42	32.53	25.30
10.	7.89	31.40	24.49	105.	8.44	32.63	25.37
15.	7.88	31.41	24.50	110.	8.44	32.64	25.38
20.	7.88	31.39	24.49	115.	8.46	32.67	25.40
25.	7.88	31.42	24.51	120.	8.48	32.72	25.44
30.	7.89	31.45	24.53	125.	8.53	32.80	25.50
35.	7.90	31.46	24.54	130.	8.47	32.89	25.57
40.	7.91	31.47	24.54	135.	8.44	32.67	25.64
45.	7.91	31.48	24.55	140.	8.42	33.05	25.71
50.	7.95	31.56	24.61	145.	8.49	33.13	25.76
55.	7.99	31.61	24.64	150.	8.51	33.21	25.82
60.	8.04	31.72	24.72	155.	8.50	33.32	25.91
65.	8.06	31.76	24.75	160.	8.48	33.39	25.96
70.	8.09	31.82	24.79	165.	8.47	33.41	25.98
75.	8.10	31.87	24.83	170.	8.48	33.43	25.99
80.	8.19	32.09	24.99	175.	8.48	33.43	25.99
85.	8.24	32.13	25.01	180.	8.47	33.41	25.98



REFERENCE NO. 73- 7-157 STN- D DATE 21/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 2.1  
 RESULTS OF STD CAST 62 POINTS TAKEN FROM ANALOG TRACE

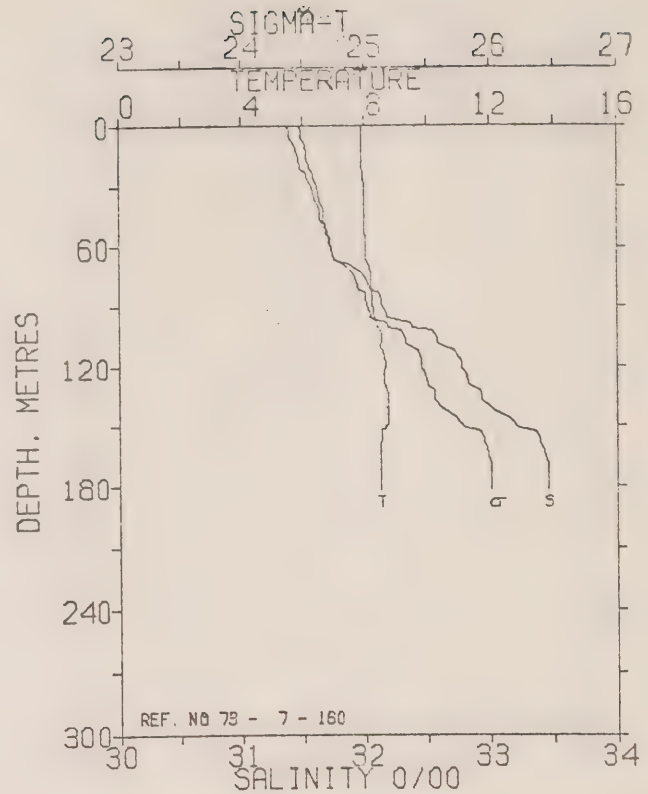
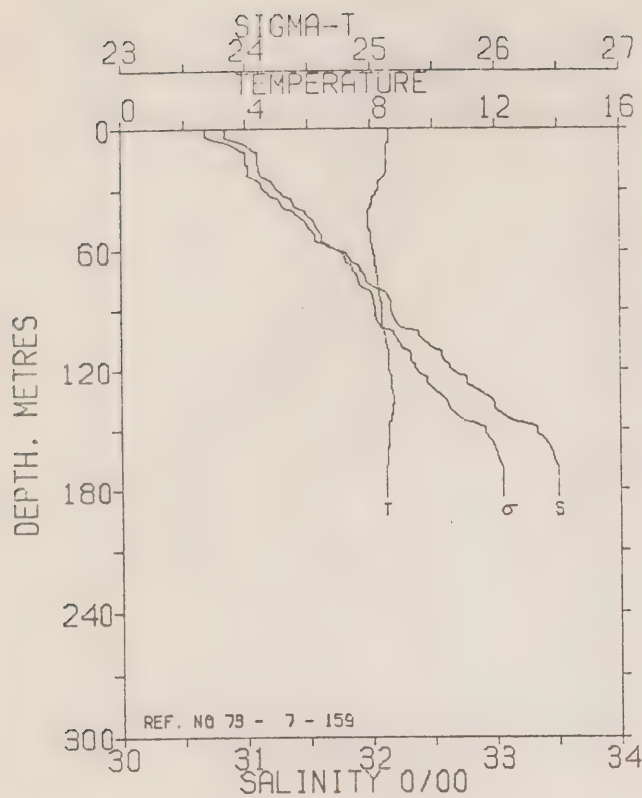
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA E	POT EN	SOUND VEL
0	7.95	31.56	24.61	333.8	0.0	0.0	1478.
10	7.99	31.62	24.65	330.3	0.33	0.02	1479.
20	8.00	31.65	24.67	328.7	0.66	0.07	1479.
30	8.03	31.70	24.71	325.4	0.99	0.15	1479.
50	8.05	31.78	24.77	319.9	1.63	0.41	1480.
75	8.14	32.06	24.97	300.7	2.41	0.91	1481.
100	8.22	32.29	25.11	288.0	3.15	1.56	1482.
125	8.26	32.46	25.27	273.6	3.86	2.38	1483.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.95	31.56	24.61	75.	8.14	32.06	24.97
5.	7.97	31.58	24.62	80.	8.17	32.12	25.01
10.	7.99	31.62	24.65	85.	8.18	32.15	25.04
15.	7.99	31.63	24.66	90.	8.19	32.18	25.06
20.	8.00	31.65	24.67	95.	8.20	32.21	25.08
25.	8.02	31.68	24.69	100.	8.22	32.25	25.11
30.	8.03	31.70	24.71	105.	8.22	32.26	25.12
35.	8.04	31.72	24.72	110.	8.22	32.28	25.13
40.	8.04	31.74	24.74	115.	8.23	32.30	25.15
45.	8.04	31.76	24.75	120.	8.23	32.32	25.16
50.	8.05	31.78	24.77	125.	8.26	32.46	25.27
55.	8.05	31.80	24.78	130.	8.33	32.77	25.50
60.	8.05	31.83	24.80	135.	8.40	33.04	25.70
65.	8.09	31.92	24.87	140.	8.40	33.05	25.70

REFERENCE NO. 73- 7-158 STN- A DATE 21/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 3.2  
 RESULTS OF STD CAST 94 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.85	31.39	24.49	345.1	0.0	0.0	1478.
10	7.86	31.41	24.51	344.2	0.35	0.02	1478.
20	7.84	31.42	24.51	343.8	0.69	0.07	1478.
30	7.85	31.42	24.51	342.5	1.03	0.16	1478.
50	7.91	31.45	24.53	342.4	1.72	0.44	1479.
75	8.00	31.62	24.65	331.3	2.56	0.98	1480.
100	8.25	32.08	24.97	300.9	3.35	1.68	1482.
125	8.61	32.57	25.30	270.5	4.05	2.48	1484.
150	8.74	32.96	25.59	243.4	4.65	3.37	1486.
175	8.35	33.52	26.08	195.9	5.23	4.26	1485.
200	8.33	33.56	26.12	194.1	5.72	5.19	1496.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.85	31.39	24.49	115.	8.58	32.54	25.28
5.	7.86	31.39	24.49	120.	8.59	32.55	25.29
10.	7.86	31.41	24.51	125.	8.60	32.57	25.30
15.	7.84	31.41	24.51	130.	8.61	32.69	25.39
20.	7.84	31.42	24.51	135.	8.64	32.75	25.43
25.	7.84	31.42	24.51	140.	8.75	32.88	25.52
30.	7.85	31.42	24.51	145.	8.77	32.89	25.53
35.	7.84	31.43	24.52	150.	8.74	32.96	25.59
40.	7.86	31.43	24.52	155.	8.67	33.16	25.76
45.	7.88	31.44	24.52	160.	8.70	33.24	25.81
50.	7.91	31.45	24.53	165.	8.53	33.37	25.94
55.	7.91	31.46	24.53	170.	8.40	33.49	26.06
60.	7.92	31.47	24.54	175.	8.35	33.52	26.08
65.	7.98	31.56	24.61	180.	8.35	33.55	26.11
70.	8.00	31.59	24.63	185.	8.40	33.56	26.11
75.	8.00	31.62	24.65	190.	8.33	33.56	26.12
80.	8.06	31.69	24.70	195.	8.45	33.56	26.10
85.	8.09	31.79	24.77	200.	8.40	33.51	26.07
90.	8.16	31.94	24.88	205.	8.31	33.58	26.13
95.	8.24	32.07	24.97	210.	8.36	33.58	26.13
100.	8.25	32.08	24.97	215.	8.26	33.57	26.13
105.	8.29	32.20	25.06	220.	8.23	33.59	26.15



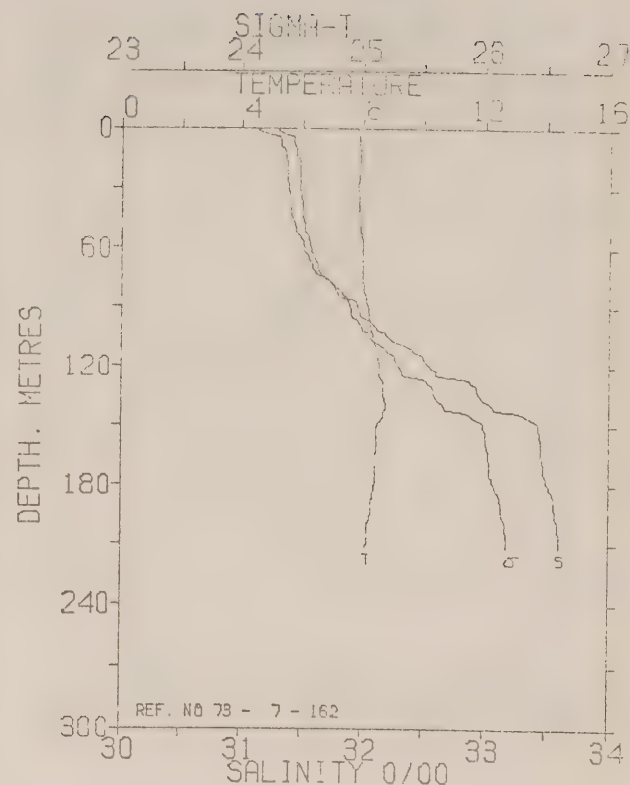
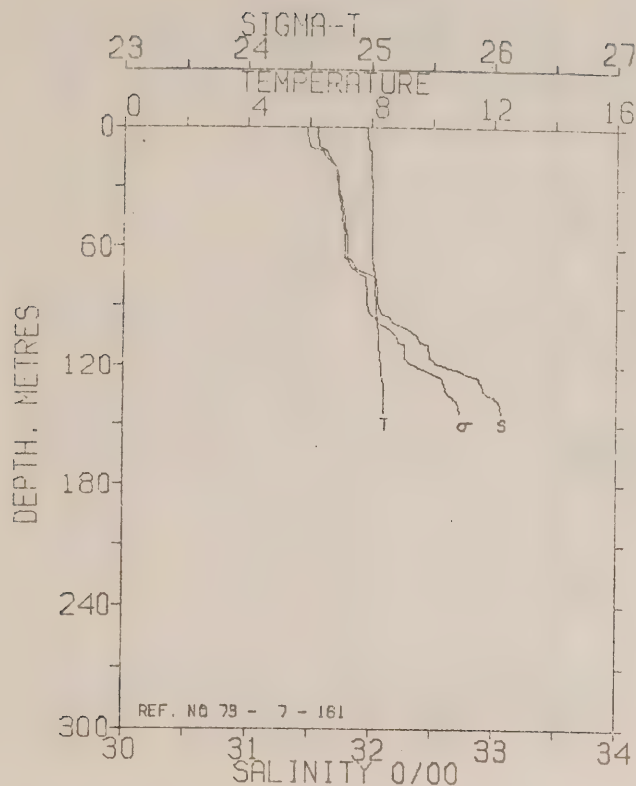
REFERENCE NO. 73- 7-159 STN- B DATE 21/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 4.0  
 RESULTS OF STD CAST 97 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.59	30.68	23.83	408.2	0.0	0.0	1480.
10	8.51	30.93	24.04	388.9	0.40	0.02	1480.
20	8.51	31.01	24.10	383.1	0.79	0.08	1480.
30	8.20	31.15	24.25	368.6	1.16	0.17	1479.
50	7.94	31.53	24.58	337.3	1.86	0.46	1479.
75	8.19	31.96	24.89	308.6	2.67	0.97	1481.
100	8.40	32.37	25.18	281.6	3.41	1.63	1483.
125	8.63	32.76	25.45	256.6	4.09	2.41	1484.
150	8.53	33.33	25.91	212.9	4.68	3.24	1485.
175	8.46	33.50	26.05	199.9	5.19	4.08	1486.

REFERENCE NO. 73- 7-160 STN- C DATE 21/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 5.0  
 RESULTS OF STD CAST 80 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.90	31.38	24.48	346.5	0.0	0.0	1478.
10	7.91	31.43	24.51	343.4	0.35	0.02	1478.
20	7.93	31.48	24.55	340.5	0.69	0.07	1478.
30	7.96	31.57	24.61	334.1	1.02	0.16	1479.
50	8.01	31.68	24.69	327.1	1.69	0.43	1479.
75	8.18	32.00	24.92	305.6	2.49	0.53	1481.
100	8.41	32.38	25.19	280.8	3.23	1.59	1483.
125	8.63	32.81	25.49	252.6	3.88	2.34	1485.
150	8.70	33.21	25.78	224.9	4.49	3.19	1486.
175	8.51	33.45	26.00	204.4	5.01	4.05	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.59	30.68	23.83	95.	8.33	32.19	25.05	0.	7.90	31.38	24.48	95.	8.31	32.18	25.04
5.	8.59	30.73	23.87	100.	8.40	32.37	25.18	5.	7.91	31.39	24.48	100.	8.41	32.38	25.19
10.	8.51	30.93	24.04	105.	8.47	32.42	25.21	10.	7.91	31.43	24.51	105.	8.54	32.57	25.32
15.	8.50	31.00	24.09	110.	8.54	32.56	25.30	15.	7.91	31.45	24.53	110.	8.51	32.63	25.37
20.	8.51	31.01	24.10	115.	8.54	32.58	25.32	20.	7.93	31.48	24.55	115.	8.62	32.75	25.44
25.	8.32	31.07	24.17	120.	8.58	32.65	25.37	25.	7.94	31.53	24.59	120.	8.66	32.78	25.46
30.	8.20	31.15	24.25	125.	8.63	32.76	25.45	30.	7.96	31.57	24.61	125.	8.63	32.81	25.49
35.	8.04	31.26	24.36	130.	8.66	32.84	25.51	35.	7.96	31.60	24.63	130.	8.67	32.85	25.51
40.	7.90	31.35	24.45	135.	8.72	32.97	25.60	40.	7.98	31.62	24.65	135.	8.74	32.94	25.57
45.	7.93	31.47	24.54	140.	8.66	33.02	25.64	45.	7.99	31.64	24.66	140.	8.73	32.99	25.61
50.	7.94	31.53	24.58	145.	8.58	33.13	25.75	50.	8.01	31.68	24.69	145.	8.74	33.13	25.72
55.	7.98	31.56	24.60	150.	8.53	33.23	25.91	55.	8.03	31.72	24.72	150.	8.70	33.21	25.78
60.	8.08	31.75	24.74	155.	8.53	33.29	25.96	60.	8.05	31.73	24.73	155.	8.54	33.28	25.95
65.	8.11	31.82	24.80	160.	8.51	33.44	26.00	65.	8.06	31.75	24.74	160.	8.51	33.41	25.97
70.	8.16	31.91	24.85	165.	8.50	33.47	26.02	70.	8.12	31.89	24.84	165.	8.51	33.43	25.99
75.	8.19	31.94	24.89	170.	8.46	33.50	26.05	75.	8.18	32.00	24.92	170.	8.51	33.45	26.01
80.	8.24	32.10	24.99	175.	8.46	33.50	26.05	80.	8.21	32.04	24.94	175.	8.51	33.45	26.00
85.	8.31	32.15	25.02	180.	8.47	33.50	26.05	85.	8.26	32.13	25.01	180.	8.52	33.46	26.01



REFERENCE NO. 73- 7-161 STN- D DATE 21/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 6.0  
 RESULTS OF STD CAST 56 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.87	31.48	24.56	338.7	0.0	0.0	1478.
10	7.89	31.49	24.56	338.6	0.34	0.02	1478.
20	8.01	31.70	24.71	324.6	0.67	0.07	1479.
30	8.03	31.73	24.73	322.9	0.99	0.15	1479.
50	8.05	31.79	24.77	319.2	1.63	0.41	1480.
75	8.14	32.03	24.95	302.7	2.42	0.91	1481.
100	8.20	32.25	25.11	287.7	3.17	1.58	1482.
125	8.33	32.21	25.53	248.7	3.85	2.36	1483.

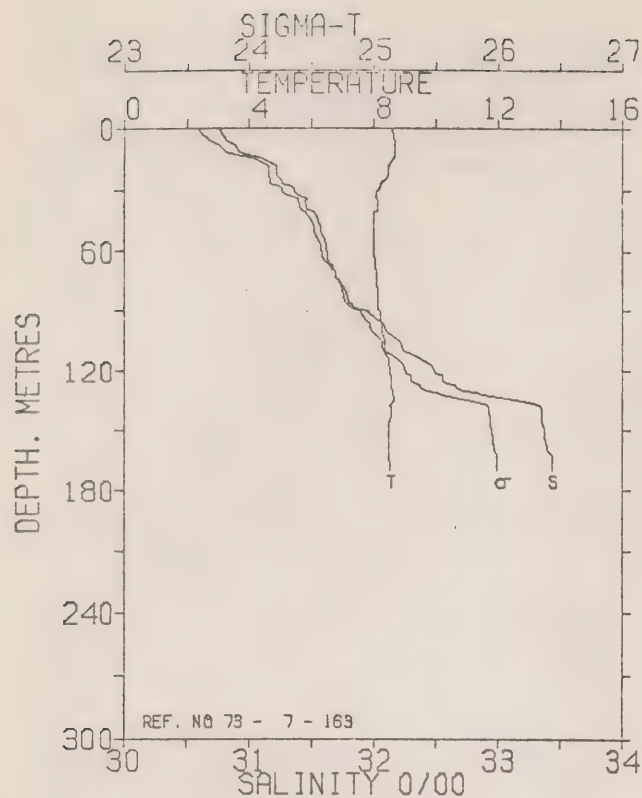
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.87	31.48	24.56	75.	8.14	32.03	24.95
5.	7.87	31.48	24.56	80.	8.15	32.05	24.96
10.	7.89	31.49	24.56	85.	8.15	32.05	24.96
15.	7.98	31.62	24.65	90.	8.16	32.06	24.97
20.	8.01	31.70	24.71	95.	8.18	32.15	25.04
25.	8.01	31.72	24.72	100.	8.20	32.25	25.11
30.	8.03	31.73	24.73	105.	8.24	32.39	25.22
35.	8.04	31.75	24.74	110.	8.28	32.47	25.27
40.	8.05	31.77	24.76	115.	8.29	32.45	25.25
45.	8.05	31.77	24.76	120.	8.34	32.60	25.36
50.	8.05	31.79	24.77	125.	8.33	32.81	25.53
55.	8.05	31.81	24.79	130.	8.41	32.51	25.60
60.	8.06	31.73	24.73	135.	8.42	32.56	25.63
65.	8.06	31.81	24.79	140.	8.42	33.05	25.71

REFERENCE NO. 73- 7-162. STN- A DATE 21/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 7.0  
 RESULTS OF STD CAST 109 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.80	31.13	24.30	363.8	0.0	0.0	1477.
10	7.89	31.33	24.44	350.6	0.35	0.02	1478.
20	7.87	31.37	24.47	347.6	0.70	0.07	1478.
30	7.85	31.38	24.48	346.7	1.05	0.16	1478.
50	7.93	31.44	24.52	343.5	1.74	0.44	1479.
75	7.99	31.68	24.70	326.7	2.59	0.58	1480.
100	8.27	32.10	24.99	299.7	3.37	1.67	1482.
125	8.57	32.65	25.37	263.9	4.07	2.48	1484.
150	8.49	33.43	26.00	204.9	4.65	3.29	1485.
175	8.42	33.49	26.05	200.1	5.16	4.13	1485.
200	8.16	33.60	26.17	188.6	5.64	5.06	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.80	31.13	24.30	110.	8.46	32.36	25.16
5.	7.86	31.31	24.42	115.	8.52	32.50	25.26
10.	7.89	31.33	24.44	120.	8.53	32.55	25.30
15.	7.89	31.36	24.46	125.	8.57	32.65	25.37
20.	7.87	31.37	24.47	130.	8.69	32.94	25.58
25.	7.86	31.37	24.47	135.	8.70	32.56	25.59
30.	7.85	31.38	24.48	140.	8.76	33.06	25.66
35.	7.86	31.39	24.49	145.	8.64	33.32	25.89
40.	7.87	31.40	24.49	150.	8.45	33.43	26.00
45.	7.88	31.41	24.50	155.	8.46	33.45	26.01
50.	7.93	31.44	24.52	160.	8.45	33.45	26.02
55.	7.95	31.48	24.55	165.	8.43	33.46	26.03
60.	7.98	31.51	24.57	170.	8.42	33.48	26.04
65.	7.98	31.55	24.60	175.	8.42	33.49	26.05
70.	7.98	31.58	24.62	180.	8.39	33.52	26.08
75.	7.99	31.68	24.70	185.	8.33	33.56	26.12
80.	8.05	31.78	24.77	190.	8.29	33.57	26.13
85.	8.11	31.87	24.83	195.	8.27	33.58	26.14
90.	8.17	31.96	24.89	200.	8.16	33.60	26.17
95.	8.19	31.99	24.91	205.	8.15	33.61	26.18
100.	8.27	32.10	24.99	210.	8.14	33.61	26.18

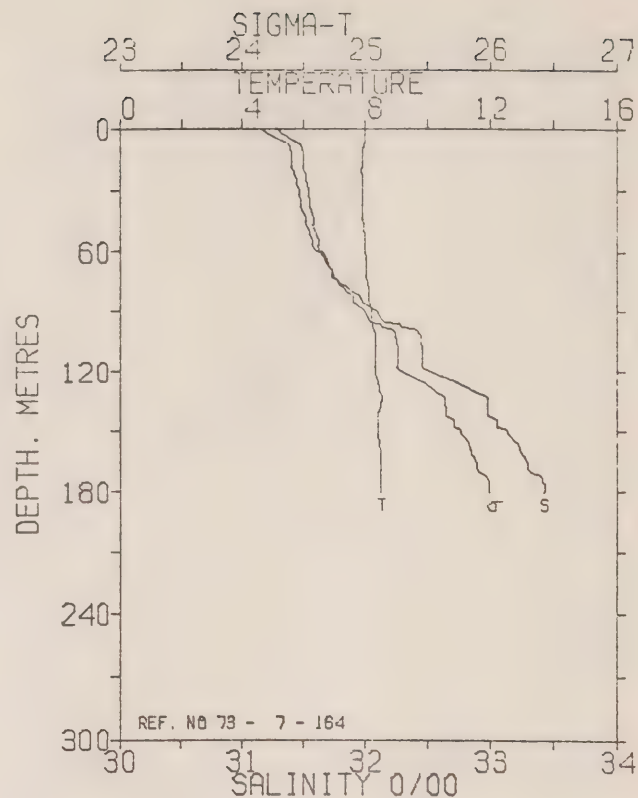




REFERENCE NO. 73- 7-163 STN- B DATE 21/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 8.0  
 RESULTS OF STD CAST 100 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.59	30.59	23.76	414.8	0.0	0.0	1479.
10	8.66	30.79	23.90	401.7	0.41	0.02	1480.
20	8.46	31.16	24.22	371.3	0.79	0.08	1480.
30	8.12	31.27	24.36	358.5	1.16	0.17	1479.
50	7.97	31.52	24.57	338.5	1.85	0.45	1479.
75	8.08	31.72	24.72	324.9	2.68	0.98	1480.
100	8.27	32.09	24.98	300.3	3.47	1.68	1482.
125	8.54	32.55	25.29	271.0	4.18	2.50	1484.
150	8.49	33.37	25.95	209.3	4.75	3.29	1485.

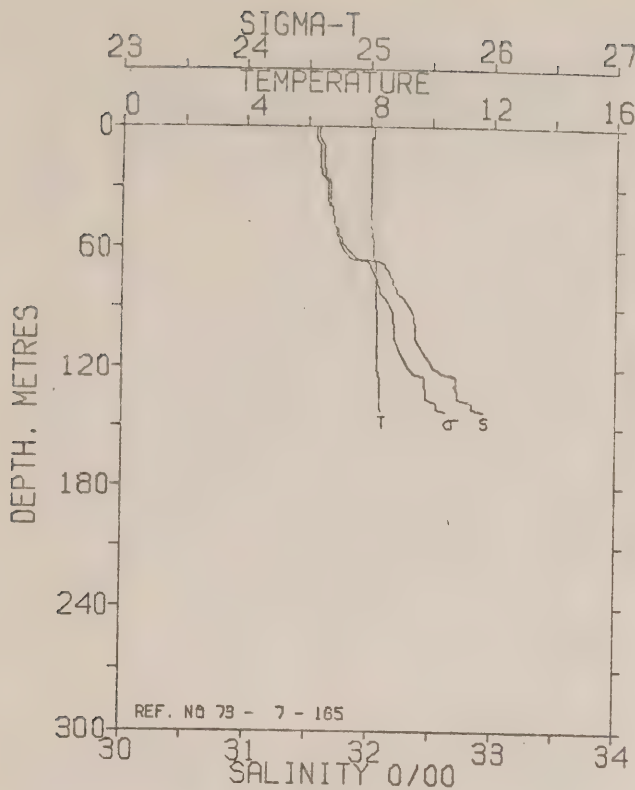
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.59	30.59	23.76	90.	8.16	31.55	24.89
5.	8.65	30.66	23.81	95.	8.24	32.05	24.95
10.	8.66	30.79	23.90	100.	8.27	32.09	24.98
15.	8.59	31.06	24.12	105.	8.31	32.20	25.06
20.	8.46	31.16	24.22	110.	8.35	32.25	25.09
25.	8.33	31.17	24.25	115.	8.46	32.41	25.20
30.	8.12	31.27	24.36	120.	8.50	32.48	25.25
35.	8.12	31.39	24.45	125.	8.54	32.55	25.29
40.	8.13	31.41	24.46	130.	8.56	32.73	25.43
45.	7.97	31.50	24.56	135.	8.59	33.21	25.80
50.	7.97	31.52	24.57	140.	8.52	33.36	25.93
55.	7.98	31.56	24.61	145.	8.49	33.35	25.93
60.	8.00	31.58	24.62	150.	8.49	33.37	25.95
65.	8.01	31.61	24.64	155.	8.47	33.38	25.96
70.	8.07	31.68	24.69	160.	8.47	33.39	25.97
75.	8.08	31.72	24.72	165.	8.49	33.43	25.99
80.	8.11	31.77	24.75	170.	8.49	33.43	25.99



REFERENCE NO. 73- 7-164 STN- C DATE 21/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 9.0  
 RESULTS OF STD CAST 82 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.00	31.16	24.29	364.3	0.0	0.0	1478.
10	7.89	31.39	24.49	345.8	0.35	0.02	1478.
20	7.88	31.41	24.50	344.7	0.70	0.07	1478.
30	7.93	31.47	24.54	341.2	1.04	0.16	1479.
50	7.96	31.55	24.60	336.0	1.72	0.43	1479.
75	8.07	31.79	24.77	315.9	2.54	0.56	1480.
100	8.30	32.42	25.23	276.5	3.30	1.63	1482.
125	8.42	32.73	25.45	255.8	3.98	2.41	1484.
150	8.43	33.13	25.77	226.2	4.58	3.24	1485.
175	8.49	33.42	25.98	206.3	5.12	4.14	1486.

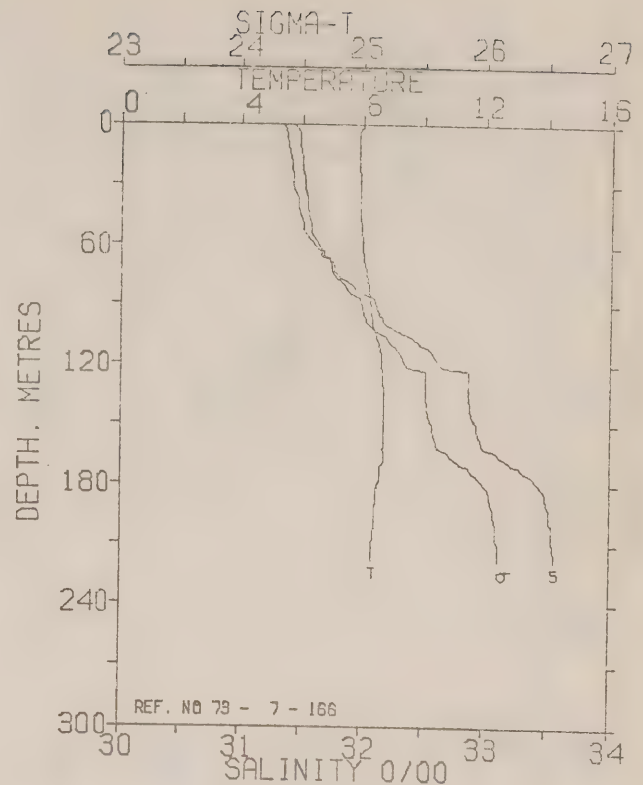
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.00	31.16	24.29	95.	8.22	32.16	25.04
5.	7.99	31.29	24.39	100.	8.30	32.42	25.23
10.	7.89	31.39	24.49	105.	8.31	32.45	25.25
15.	7.88	31.40	24.49	110.	8.31	32.46	25.26
20.	7.88	31.41	24.50	115.	8.30	32.37	25.19
25.	7.92	31.44	24.52	120.	8.34	32.50	25.29
30.	7.93	31.47	24.54	125.	8.42	32.73	25.45
35.	7.93	31.48	24.55	130.	8.45	32.87	25.56
40.	7.93	31.49	24.56	135.	8.51	32.98	25.63
45.	7.94	31.52	24.58	140.	8.42	32.58	25.65
50.	7.96	31.55	24.60	145.	8.42	33.05	25.71
55.	7.98	31.58	24.62	150.	8.42	33.13	25.77
60.	8.00	31.64	24.66	155.	8.46	33.19	25.81
65.	8.03	31.68	24.69	160.	8.49	33.24	25.84
70.	8.06	31.74	24.73	165.	8.49	33.29	25.88
75.	8.07	31.79	24.77	170.	8.49	33.32	25.90
80.	8.11	31.89	24.85	175.	8.49	33.42	25.98
85.	8.15	31.97	24.90	180.	8.51	33.43	25.99



REFERENCE NO. 73-7-165 STN- D DATE 21/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 10.0  
 RESULTS OF STD CAST 61 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.07	31.56	24.59	335.4	0.0	0.0	1479.
10	8.04	31.59	24.62	333.2	0.34	0.02	1479.
20	8.03	31.59	24.62	333.3	0.67	0.07	1479.
30	8.05	31.66	24.67	328.7	1.00	0.15	1479.
50	8.06	31.73	24.72	324.0	1.65	0.42	1480.
75	8.22	32.18	25.05	292.9	2.43	0.91	1481.
100	8.24	32.37	25.20	279.5	3.14	1.55	1482.
125	8.31	32.70	25.45	256.5	3.83	2.33	1483.

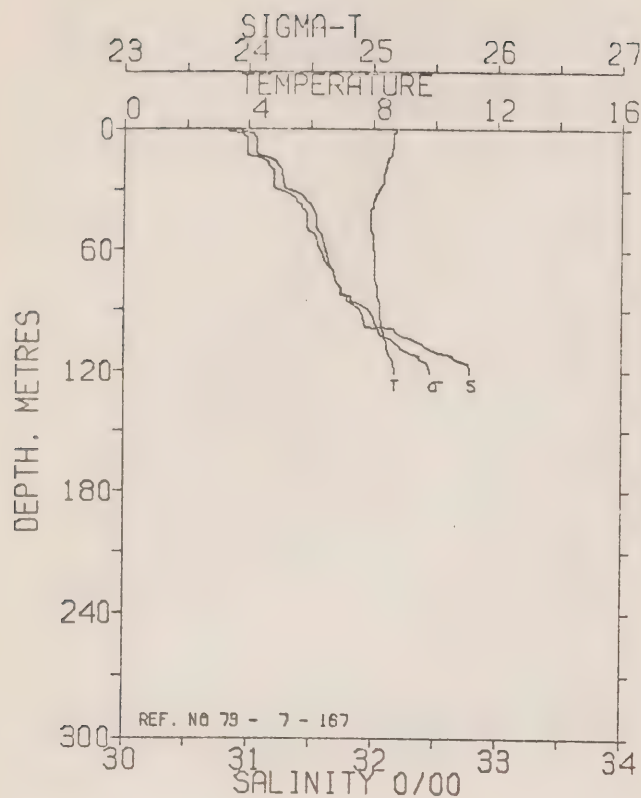
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.07	31.56	24.59	75.	8.22	32.18	25.05
5.	8.12	31.56	24.59	80.	8.23	32.21	25.08
10.	8.04	31.59	24.62	85.	8.22	32.27	25.13
15.	8.03	31.59	24.62	90.	8.23	32.32	25.17
20.	8.03	31.59	24.62	95.	8.24	32.36	25.19
25.	8.05	31.62	24.64	100.	8.24	32.37	25.20
30.	8.05	31.66	24.67	105.	8.25	32.37	25.20
35.	8.05	31.64	24.66	110.	8.25	32.41	25.23
40.	8.06	31.70	24.70	115.	8.25	32.47	25.27
45.	8.06	31.70	24.70	120.	8.27	32.51	25.30
50.	8.06	31.73	24.72	125.	8.31	32.70	25.45
55.	8.08	31.78	24.76	130.	8.31	32.70	25.45
60.	8.10	31.81	24.78	135.	8.32	32.71	25.46
65.	8.12	31.88	24.84	140.	8.34	32.83	25.54



REFERENCE NO. 73-7-166 STN- A DATE 21/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 11.0  
 RESULTS OF STD CAST 107 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.01	31.33	24.42	351.7	0.0	0.0	1478.
10	7.87	31.38	24.48	346.5	0.35	0.02	1478.
20	7.88	31.40	24.50	345.1	0.69	0.07	1478.
30	7.89	31.43	24.51	343.5	1.04	0.16	1478.
50	7.94	31.51	24.57	338.8	1.72	0.44	1479.
75	8.13	31.79	24.76	320.4	2.55	0.96	1480.
100	8.34	32.19	25.04	294.2	3.31	1.64	1482.
125	8.70	32.87	25.52	249.6	3.99	2.42	1485.
150	8.71	32.93	25.57	245.2	4.61	3.29	1485.
175	8.58	33.37	25.93	211.3	5.20	4.26	1486.
200	8.40	33.54	26.09	196.6	5.70	5.22	1486.

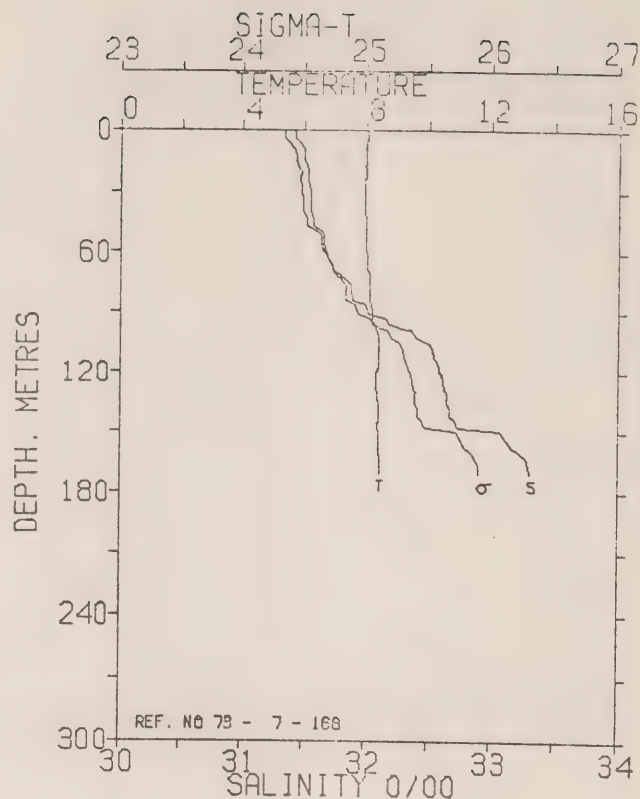
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.01	31.33	24.42	110.	8.54	32.47	25.23
5.	7.86	31.37	24.47	115.	8.61	32.59	25.32
10.	7.87	31.38	24.48	120.	8.61	32.63	25.35
15.	7.88	31.39	24.49	125.	8.70	32.87	25.52
20.	7.88	31.40	24.50	130.	8.70	32.87	25.52
25.	7.89	31.42	24.51	135.	8.71	32.86	25.51
30.	7.89	31.43	24.51	140.	8.73	32.88	25.52
35.	7.91	31.45	24.53	145.	8.71	32.89	25.54
40.	7.91	31.47	24.54	150.	8.71	32.93	25.57
45.	7.92	31.48	24.55	155.	8.71	32.95	25.58
50.	7.94	31.51	24.57	160.	8.69	32.88	25.53
55.	7.96	31.53	24.58	165.	8.71	33.11	25.71
60.	7.97	31.61	24.64	170.	8.61	33.21	25.80
65.	8.01	31.65	24.67	175.	8.58	33.27	25.93
70.	8.08	31.76	24.75	180.	8.52	33.43	25.99
75.	8.13	31.79	24.76	185.	8.47	33.49	26.04
80.	8.18	31.91	24.85	190.	8.44	33.50	26.05
85.	8.22	32.01	24.92	195.	8.42	33.52	26.07
90.	8.28	32.10	24.98	200.	8.40	33.54	26.09
95.	8.30	32.13	25.00	205.	8.37	33.55	26.10
100.	8.34	32.19	25.04	210.	8.35	33.55	26.11
105.	8.43	32.34	25.15	215.	8.34	33.56	26.12



REFERENCE NO. 73- 7-167 STN- B DATE 21/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 12.1  
 RESULTS OF STD CAST 70 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.70	30.84	23.94	397.8	0.0	0.0	1480.
10	8.60	30.98	24.06	386.5	0.39	0.02	1480.
20	8.37	31.19	24.26	367.8	0.77	0.08	1480.
30	8.17	31.23	24.32	362.3	1.13	0.17	1479.
50	7.92	31.48	24.55	340.7	1.82	0.45	1479.
75	8.06	31.69	24.70	326.9	2.66	0.98	1480.
100	8.29	32.17	25.04	294.9	3.44	1.68	1482.

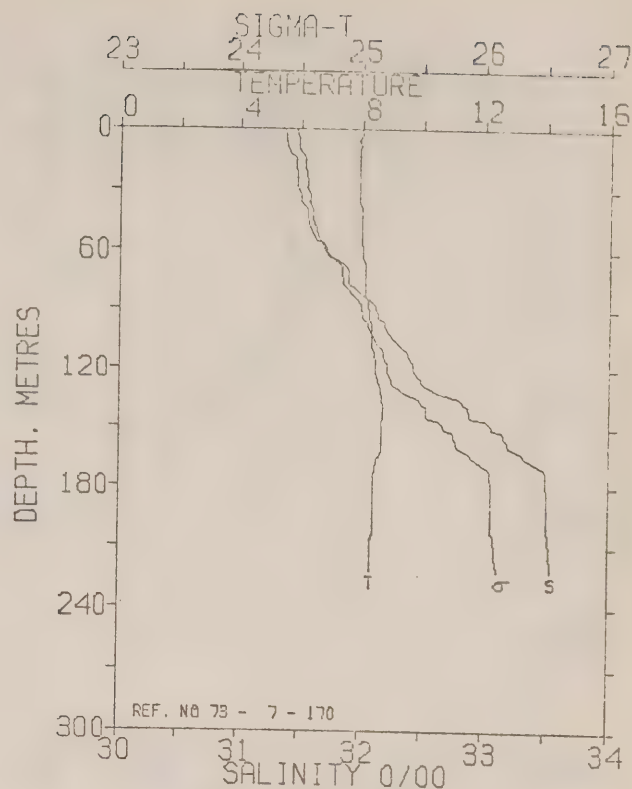
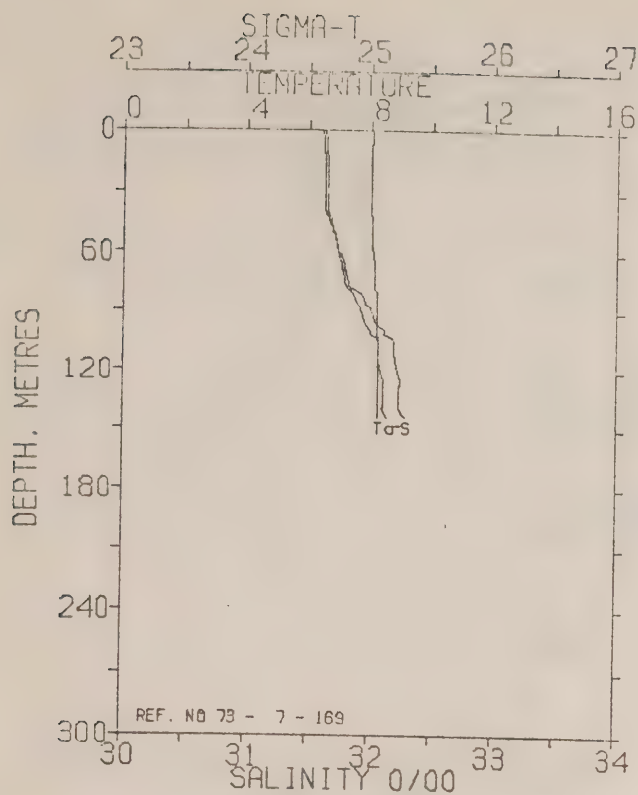
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.70	30.84	23.94	65.	8.02	31.60	24.63
5.	8.61	30.98	24.06	70.	8.06	31.66	24.67
10.	8.60	30.98	24.06	75.	8.06	31.69	24.70
15.	8.45	31.12	24.16	80.	8.11	31.74	24.73
20.	8.37	31.19	24.26	85.	8.16	31.82	24.78
25.	8.34	31.20	24.27	90.	8.22	31.86	24.88
30.	8.17	31.23	24.32	95.	8.23	32.01	24.92
35.	8.05	31.38	24.45	100.	8.29	32.17	25.04
40.	7.91	31.44	24.52	105.	8.40	32.35	25.16
45.	7.92	31.47	24.54	110.	8.47	32.49	25.26
50.	7.92	31.48	24.55	115.	8.62	32.73	25.42
55.	7.98	31.55	24.59	120.	8.66	32.78	25.46



REFERENCE NO. 73- 7-168 STN- C DATE 21/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 13.1  
 RESULTS OF STD CAST 76 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.04	31.33	24.42	352.1	0.0	0.0	1478.
10	7.97	31.42	24.50	344.9	0.35	0.02	1478.
20	7.99	31.47	24.53	341.7	0.69	0.07	1479.
30	7.95	31.48	24.55	340.5	1.03	0.16	1479.
50	7.98	31.62	24.65	331.1	1.71	0.43	1479.
75	8.12	31.86	24.82	315.1	2.53	0.95	1481.
100	8.36	32.37	25.18	281.1	3.29	1.63	1483.
125	8.35	32.61	25.37	263.3	3.96	2.40	1483.
150	8.42	33.07	25.72	230.6	4.61	3.21	1484.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.04	31.33	24.42	90.	8.18	32.02	24.93
5.	7.99	31.36	24.45	95.	8.24	32.18	25.05
10.	7.97	31.42	24.50	100.	8.36	32.37	25.18
15.	7.98	31.43	24.51	105.	8.42	32.49	25.27
20.	7.99	31.47	24.53	110.	8.42	32.53	25.30
25.	7.96	31.47	24.54	115.	8.41	32.56	25.33
30.	7.95	31.48	24.55	120.	8.35	32.59	25.35
35.	7.94	31.49	24.55	125.	8.35	32.61	25.37
40.	7.95	31.49	24.55	130.	8.37	32.65	25.40
45.	7.96	31.52	24.57	135.	8.40	32.65	25.39
50.	7.98	31.62	24.65	140.	8.42	32.68	25.41
55.	8.01	31.64	24.66	145.	8.38	32.72	25.46
60.	8.02	31.66	24.68	150.	8.42	33.07	25.72
65.	8.06	31.71	24.71	155.	8.43	33.14	25.77
70.	8.08	31.75	24.74	160.	8.43	33.22	25.83
75.	8.12	31.86	24.82	165.	8.44	33.29	25.89
80.	8.13	31.88	24.83	170.	8.45	33.31	25.90



REFERENCE NO. 73- 7-169 STN- D DATE 21/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 14.0  
 RESULTS OF STD CAST 47 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA	SVA	DELTA	POT EN	SOUND
			T	D	D		VEL
0	8.04	31.60	24.63	332.0	0.0	0.0	1479.
10	8.01	31.62	24.64	331.0	0.33	0.02	1479.
20	8.01	31.62	24.65	330.8	0.66	0.07	1479.
30	8.01	31.62	24.65	331.0	0.99	0.15	1479.
50	8.04	31.70	24.70	326.0	1.65	0.42	1480.
75	8.11	31.81	24.78	318.6	2.46	0.93	1480.
100	8.22	32.11	25.00	298.4	3.23	1.62	1482.
125	8.23	32.24	25.10	289.6	3.96	2.46	1482.

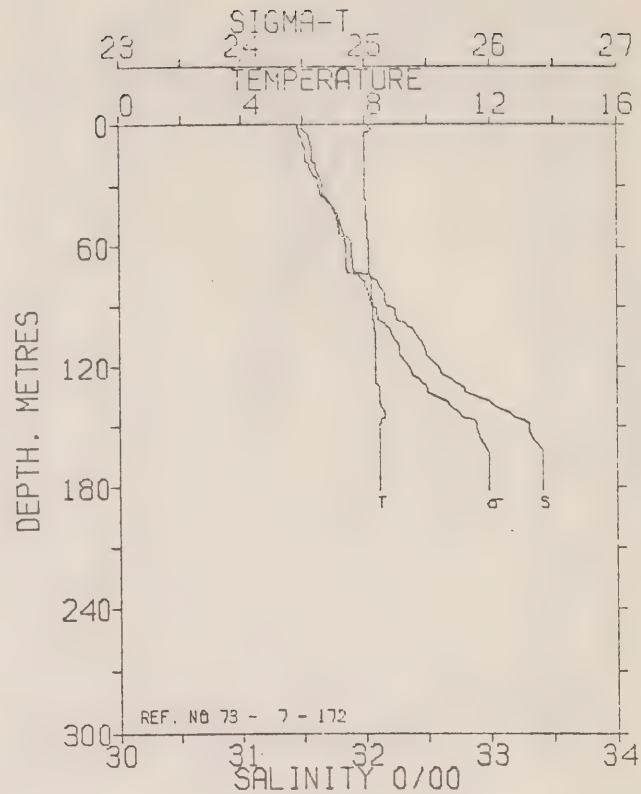
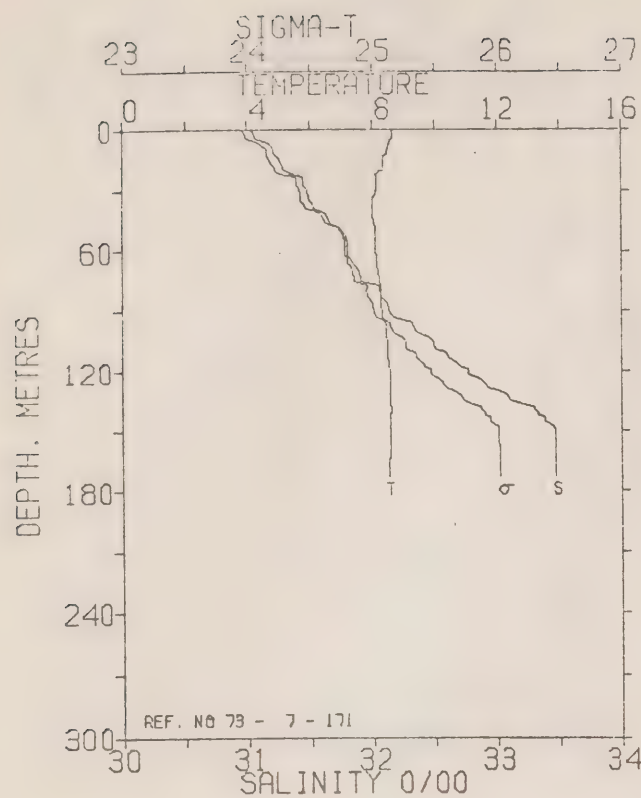
DEPTH	TEMP	SAL	SIGMA	DEPTH	TEMP	SAL	SIGMA
			T				T
0.	8.04	31.60	24.63	75.	8.11	31.81	24.78
5.	8.03	31.61	24.64	80.	8.18	31.89	24.84
10.	8.01	31.62	24.64	85.	8.19	31.55	24.88
15.	8.01	31.62	24.65	90.	8.22	32.01	24.92
20.	8.01	31.62	24.33	95.	8.22	32.04	24.94
25.	8.01	31.64	24.66	100.	8.22	32.11	25.00
30.	7.89	31.40	24.49	105.	8.23	32.18	25.06
35.	8.02	31.63	24.65	110.	8.23	32.19	25.06
40.	7.99	31.55	24.59	115.	8.23	32.20	25.07
45.	8.01	31.69	24.70	120.	8.23	32.22	25.08
50.	8.04	31.70	24.70	125.	8.23	32.24	25.10
55.	8.06	31.72	24.72	130.	8.23	32.24	25.10
60.	8.07	31.74	24.73	135.	8.23	32.21	25.08
65.	8.10	31.78	24.76	140.	8.23	32.23	25.09

REFERENCE NO. 73- 7-170 STN- A DATE 21/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 15.2  
 RESULTS OF STD CAST 103 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA	SVA	DELTA	POT EN	SOUND
			T	D	D		VEL
0	7.94	31.36	24.46	348.6	0.0	0.0	1478.
10	7.93	31.39	24.48	346.8	0.35	0.02	1478.
20	7.89	31.46	24.53	341.5	0.69	0.07	1478.
30	7.91	31.48	24.55	340.2	1.03	0.16	1478.
50	7.97	31.59	24.63	333.1	1.71	0.43	1479.
75	8.09	31.89	24.85	312.6	2.51	0.94	1480.
100	8.31	32.20	25.06	293.0	3.26	1.61	1482.
125	8.53	32.49	25.25	275.2	3.97	2.42	1484.
150	8.68	32.06	25.67	235.4	4.61	3.32	1485.
175	8.43	33.50	26.06	199.4	5.15	4.21	1485.
200	8.40	33.51	26.07	198.9	5.65	5.16	1486.

DEPTH	TEMP	SAL	SIGMA	DEPTH	TEMP	SAL	SIGMA
			T				T
0.	7.94	31.36	24.46	115.	8.45	32.29	25.19
5.	7.90	31.37	24.47	120.	8.49	32.43	25.21
10.	7.93	31.39	24.48	125.	8.53	32.49	25.25
15.	7.89	31.45	24.53	130.	8.60	32.58	25.31
20.	7.89	31.46	24.53	135.	8.68	32.60	25.47
25.	7.89	31.47	24.55	140.	8.71	32.68	25.53
30.	7.91	31.48	24.55	145.	8.71	32.91	25.56
35.	7.93	31.50	24.56	150.	8.68	33.06	25.67
40.	7.97	31.55	24.60	155.	8.67	33.16	25.76
45.	7.97	31.55	24.60	160.	8.66	33.20	25.78
50.	7.97	31.59	24.63	165.	8.53	33.33	25.91
55.	7.99	31.63	24.65	170.	8.46	33.46	26.02
60.	8.03	31.71	24.71	175.	8.42	33.50	26.06
65.	8.07	31.81	24.79	180.	8.43	33.50	26.06
70.	8.09	31.88	24.84	185.	8.42	33.51	26.07
75.	8.09	31.89	24.85	190.	8.43	33.51	26.06
80.	8.13	31.96	24.90	195.	8.55	33.43	25.98
85.	8.19	32.07	24.98	200.	8.35	33.50	26.06
90.	8.24	32.11	25.00	205.	8.36	33.53	26.09
95.	8.29	32.17	25.03	210.	8.35	33.54	26.10
100.	8.31	32.20	25.06	215.	8.34	33.54	26.10
105.	8.33	32.26	25.10	220.	8.31	33.54	26.11





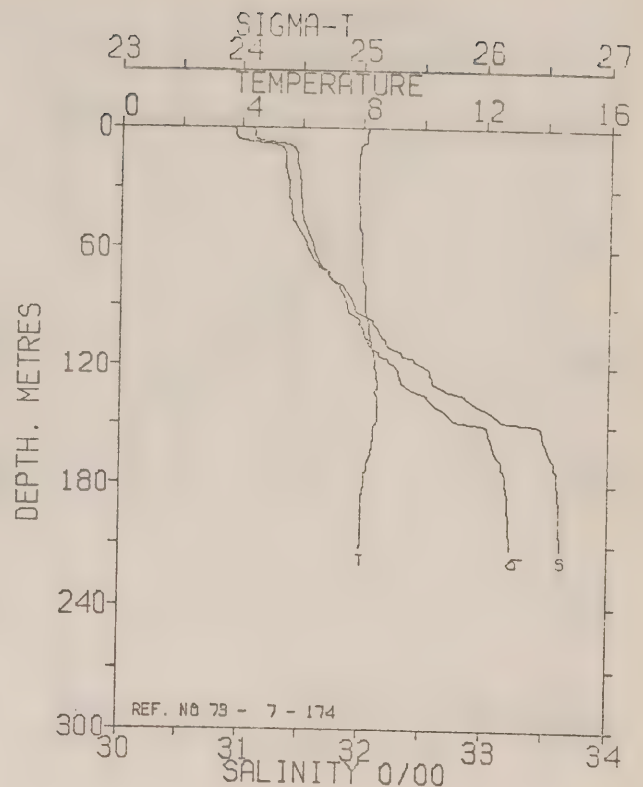
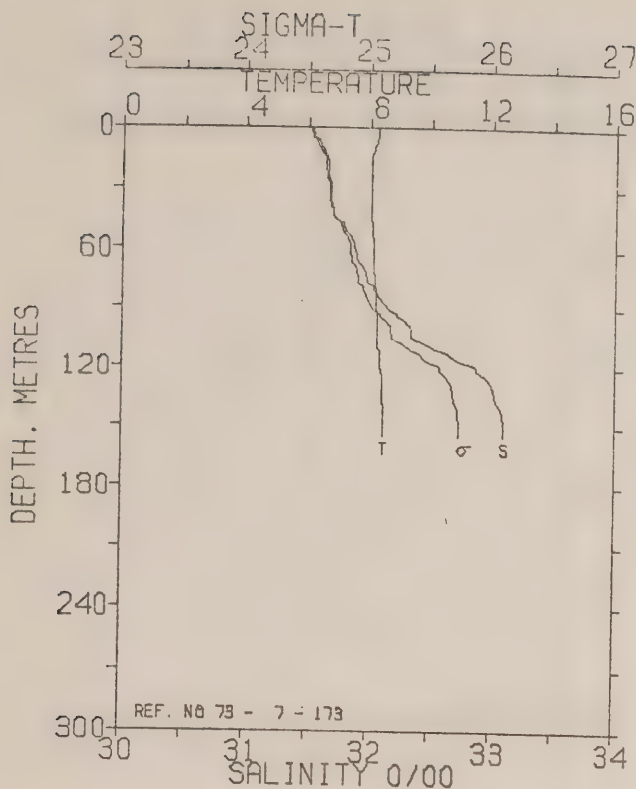
REFERENCE NO. 73- 7-171 STN- B DATE 21/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 16.0  
 RESULTS OF STD CAST 90 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.63	30.96	24.04	387.8	0.0	0.0	1480.
10	8.47	31.15	24.21	371.9	0.38	0.02	1480.
20	8.22	31.22	24.30	363.5	0.75	0.08	1479.
30	8.09	31.41	24.47	347.8	1.10	0.17	1479.
50	8.09	31.76	24.74	322.2	1.78	0.44	1480.
75	8.17	31.90	24.84	312.8	2.57	0.94	1481.
100	8.40	32.35	25.16	283.1	3.31	1.60	1483.
125	8.54	32.89	25.56	245.7	3.97	2.36	1484.
150	8.52	33.46	26.01	203.1	4.53	3.14	1485.

REFERENCE NO. 73- 7-172 STN- C DATE 21/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 17.0  
 RESULTS OF STD CAST 88 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.14	31.45	24.50	344.6	0.0	0.0	1479.
10	7.99	31.50	24.56	339.3	0.34	0.02	1478.
20	7.97	31.55	24.60	335.5	0.68	0.07	1479.
30	8.00	31.63	24.66	330.2	1.01	0.15	1479.
50	8.07	31.81	24.78	318.2	1.66	0.42	1480.
75	8.17	32.05	24.96	301.6	2.44	0.91	1481.
100	8.30	32.34	25.17	282.4	3.17	1.57	1482.
125	8.34	32.65	25.41	260.3	3.85	2.34	1483.
150	8.48	33.30	25.90	214.3	4.45	3.18	1485.
175	8.47	33.42	25.99	206.1	4.97	4.04	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.63	30.96	24.04	85.	8.27	32.10	24.98	0.	8.14	31.45	24.50	90.	8.25	32.19	25.06
5.	8.57	31.02	24.10	90.	8.29	32.14	25.01	5.	7.97	31.47	24.54	95.	8.27	32.25	25.10
10.	8.47	31.15	24.21	95.	8.38	32.32	25.14	10.	7.99	31.50	24.56	100.	8.30	32.34	25.17
15.	8.32	31.18	24.26	100.	8.40	32.35	25.16	15.	7.97	31.51	24.57	105.	8.31	32.41	25.22
20.	8.22	31.22	24.30	105.	8.46	32.49	25.26	20.	7.97	31.55	24.60	110.	8.33	32.48	25.27
25.	8.14	31.39	24.45	110.	8.47	32.59	25.34	25.	7.97	31.58	24.62	115.	8.33	32.50	25.29
30.	8.09	31.41	24.47	115.	8.50	32.67	25.40	30.	8.00	31.63	24.66	120.	8.35	32.58	25.35
35.	7.97	31.43	24.50	120.	8.53	32.77	25.47	35.	8.01	31.65	24.67	125.	8.34	32.65	25.41
40.	7.98	31.52	24.57	125.	8.54	32.89	25.56	40.	8.04	31.73	24.73	130.	8.43	32.78	25.49
45.	8.01	31.62	24.64	130.	8.56	33.03	25.67	45.	8.06	31.79	24.77	135.	8.47	32.91	25.59
50.	8.09	31.76	24.74	135.	8.57	33.13	25.75	50.	8.07	31.81	24.78	140.	8.51	33.05	25.69
55.	8.09	31.79	24.77	140.	8.57	33.31	25.89	55.	8.09	31.85	24.82	145.	8.63	33.18	25.78
60.	8.09	31.80	24.77	145.	8.56	33.38	25.95	60.	8.10	31.90	24.85	150.	8.48	33.30	25.90
65.	8.12	31.83	24.79	150.	8.52	33.46	26.01	65.	8.12	31.89	24.85	155.	8.47	33.33	25.92
70.	8.16	31.88	24.83	155.	8.52	33.47	26.02	70.	8.12	31.90	24.85	160.	8.47	33.38	25.96
75.	8.17	31.90	24.84	160.	8.51	33.47	26.02	75.	8.17	32.05	24.96	165.	8.47	33.42	25.99
								80.	8.22	32.11	25.00	170.	8.47	33.42	25.99



REFERENCE NO. 73- 7-173 STN- D DATE 21/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 18.0  
 RESULTS OF STD CAST 69 POINTS TAKEN FROM ANALOG TRACE

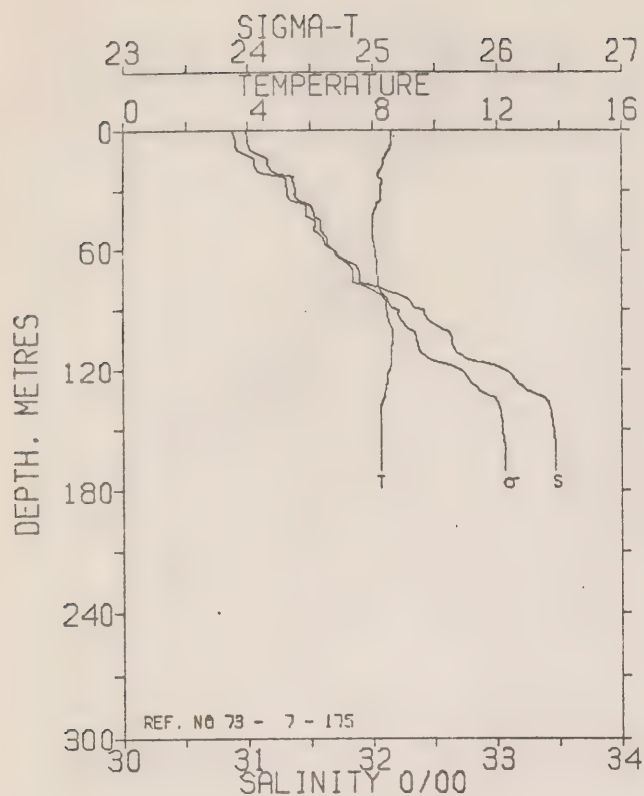
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.26	31.52	24.54	341.0	0.0	0.0	1479.
10	8.11	31.58	24.60	334.9	0.34	0.02	1479.
20	8.06	31.64	24.66	330.0	0.67	0.07	1479.
30	8.06	31.67	24.68	327.9	1.00	0.15	1479.
50	8.09	31.80	24.77	319.1	1.65	0.42	1480.
75	8.16	31.97	24.90	307.4	2.43	0.91	1481.
100	8.25	32.34	25.17	282.1	3.17	1.57	1482.
125	8.41	32.95	25.63	239.4	3.83	2.33	1484.
150	8.46	33.09	25.73	229.7	4.41	3.14	1485.

REFERENCE NO. 73- 7-174 STN- A DATE 21/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 19.0  
 RESULTS OF STD CAST 104 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.15	30.93	24.09	383.5	0.0	0.0	1478.
10	7.92	31.33	24.43	351.0	0.27	0.02	1478.
20	7.86	31.36	24.46	348.1	0.72	0.07	1478.
30	7.87	31.39	24.49	346.3	1.07	0.16	1478.
50	7.93	31.47	24.54	341.6	1.76	0.44	1479.
75	8.06	31.74	24.73	323.5	2.59	0.97	1480.
100	8.25	32.11	25.00	298.8	3.37	1.66	1482.
125	8.51	32.56	25.31	269.8	4.08	2.48	1484.
150	8.45	33.43	26.00	204.3	4.70	3.24	1485.
175	8.14	33.60	26.18	187.9	5.15	4.15	1485.
200	8.02	33.62	26.21	184.9	5.65	5.04	1484.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.26	31.52	24.54	80.	8.17	32.03	24.95
5.	8.23	31.53	24.55	85.	8.19	32.07	24.98
10.	8.11	31.58	24.60	90.	8.22	32.14	25.02
15.	8.06	31.63	24.65	95.	8.24	32.25	25.11
20.	8.06	31.64	24.66	100.	8.25	32.34	25.17
25.	8.06	31.65	24.66	105.	8.24	32.34	25.18
30.	8.06	31.67	24.68	110.	8.27	32.52	25.31
35.	8.06	31.67	24.68	115.	8.33	32.68	25.43
40.	8.06	31.69	24.69	120.	8.36	32.87	25.57
45.	8.06	31.72	24.72	125.	8.41	32.95	25.63
50.	8.09	31.80	24.77	130.	8.43	33.00	25.67
55.	8.10	31.86	24.82	135.	8.40	32.97	25.64
60.	8.12	31.88	24.83	140.	8.45	33.07	25.71
65.	8.13	31.89	24.84	145.	8.46	33.09	25.73
70.	8.14	31.94	24.88	150.	8.46	33.09	25.73
75.	8.16	31.97	24.90	155.	8.46	33.09	25.73

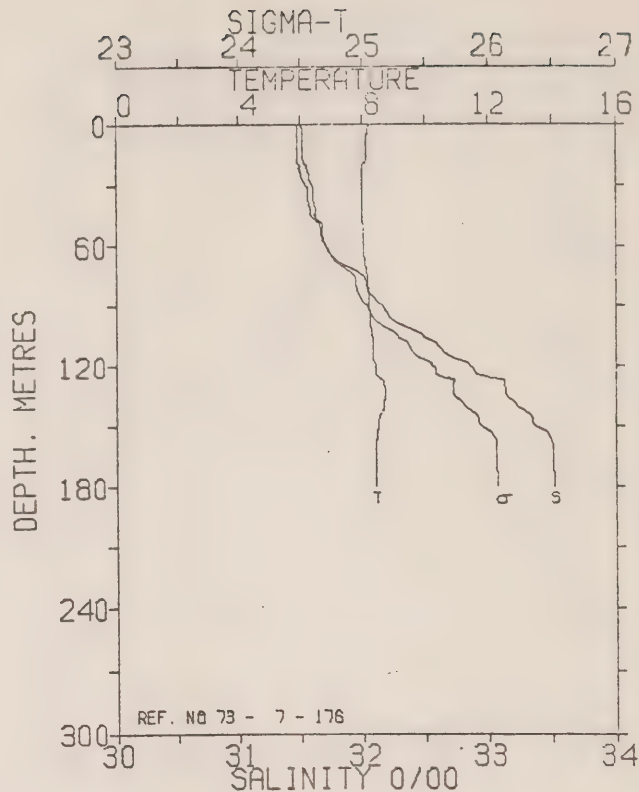
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.15	30.93	24.09	100.	8.25	32.11	25.00
5.	8.14	30.95	24.11	105.	8.29	32.17	25.04
10.	7.92	31.33	24.43	110.	8.34	32.23	25.08
15.	7.87	31.35	24.46	115.	8.43	32.34	25.15
20.	7.86	31.36	24.46	120.	8.44	32.51	25.28
25.	7.86	31.38	24.48	125.	8.51	32.66	25.36
30.	7.87	31.39	24.49	130.	8.52	32.63	25.31
35.	7.87	31.39	24.49	135.	8.51	32.66	25.36
40.	7.88	31.41	24.50	140.	8.54	32.55	25.61
45.	7.89	31.41	24.50	145.	8.55	33.08	25.71
50.	7.93	31.47	24.54	150.	8.45	33.43	26.00
55.	7.97	31.52	24.57	155.	8.39	33.48	26.05
60.	7.97	31.56	24.60	160.	8.37	33.51	26.07
65.	7.97	31.59	24.63	165.	8.30	33.54	26.10
70.	8.01	31.64	24.66	170.	8.21	33.58	26.15
75.	8.06	31.74	24.73	175.	8.14	33.60	26.18
80.	8.12	31.85	24.81	180.	8.12	33.60	26.18
85.	8.13	31.90	24.85	185.	8.06	33.61	26.20
90.	8.13	31.94	24.88	190.	8.03	33.62	26.21
95.	8.17	32.04	24.95	195.	8.01	33.63	26.22



REFERENCE NO. 73- 7-175 STN- B DATE 21/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 20.0  
 RESULTS OF STD CAST 87 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.59	30.87	23.98	394.0	0.0	0.0	1480.
10	8.52	30.92	24.02	390.1	0.39	0.02	1480.
20	8.21	31.07	24.19	374.5	0.77	0.08	1479.
30	8.25	31.32	24.38	356.7	1.13	0.17	1480.
50	7.98	31.54	24.59	337.1	1.82	0.45	1479.
75	8.15	31.89	24.84	313.3	2.63	0.96	1481.
100	8.60	32.58	25.31	265.0	3.35	1.60	1484.
125	8.45	33.15	25.78	225.1	3.98	2.32	1484.
150	8.23	33.45	26.05	199.9	4.50	3.05	1484.

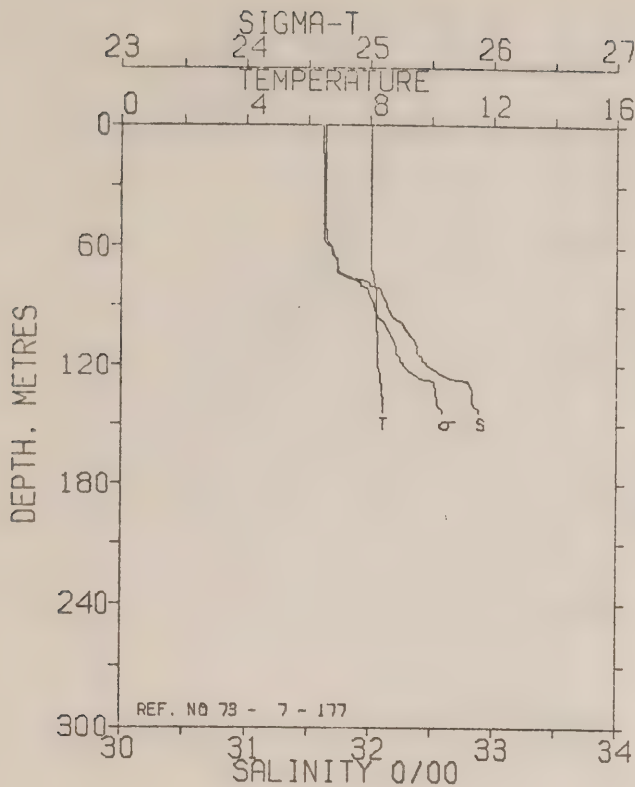
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.59	30.87	23.98	90.	8.43	32.41	25.21
5.	8.59	30.90	24.00	95.	8.50	32.46	25.23
10.	8.52	30.92	24.02	100.	8.60	32.58	25.31
15.	8.34	31.05	24.15	105.	8.61	32.64	25.36
20.	8.21	31.07	24.19	110.	8.59	32.66	25.38
25.	8.30	31.30	24.25	115.	8.59	32.81	25.49
30.	8.25	31.32	24.38	120.	8.50	33.07	25.71
35.	8.21	31.35	24.41	125.	8.45	33.15	25.78
40.	8.05	31.46	24.51	130.	8.39	33.24	25.86
45.	7.97	31.54	24.59	135.	8.29	33.40	26.00
50.	7.98	31.54	24.59	140.	8.25	33.43	26.03
55.	8.01	31.61	24.64	145.	8.24	33.44	26.04
60.	8.07	31.68	24.69	150.	8.23	33.45	26.05
65.	8.12	31.79	24.77	155.	8.23	33.46	26.06
70.	8.14	31.88	24.83	160.	8.23	33.47	26.06
75.	8.15	31.89	24.84	165.	8.23	33.47	26.06
80.	8.24	32.10	24.99	170.	8.22	33.47	26.06



REFERENCE NO. 73- 7-176 STN- C DATE 21/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 21.0  
 RESULTS OF STD CAST 78 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.19	31.47	24.51	343.7	0.0	0.0	1479.
10	8.14	31.47	24.51	343.6	0.34	0.02	1479.
20	8.01	31.49	24.55	340.5	0.65	0.07	1479.
30	7.96	31.54	24.59	336.4	1.03	0.16	1479.
50	8.01	31.66	24.68	328.4	1.69	0.43	1479.
75	8.15	32.01	24.93	304.4	2.50	0.54	1481.
100	8.26	32.31	25.15	284.1	3.24	1.00	1482.
125	8.49	32.96	25.62	235.8	3.89	2.34	1484.
150	8.50	33.37	25.95	209.4	4.45	3.12	1485.
175	8.42	33.52	26.07	198.0	4.95	3.95	1485.

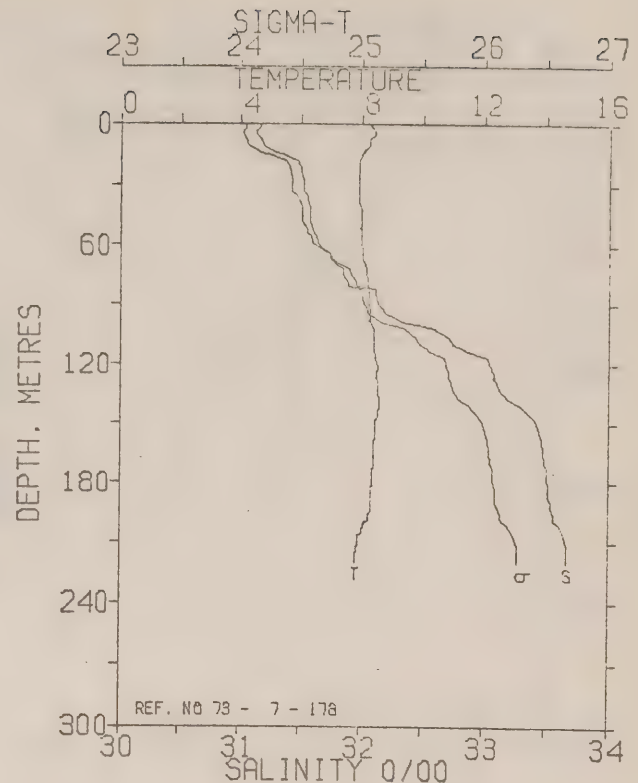
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.19	31.47	24.51	95.	8.23	32.21	25.08
5.	8.14	31.47	24.51	100.	8.26	32.21	25.15
10.	8.14	31.47	24.51	105.	8.30	32.49	25.29
15.	8.18	31.47	24.51	110.	8.34	32.60	25.36
20.	8.01	31.49	24.55	115.	8.36	32.69	25.43
25.	7.97	31.51	24.56	120.	8.39	32.85	25.55
30.	7.96	31.54	24.59	125.	8.49	32.56	25.62
35.	7.97	31.56	24.60	130.	8.70	33.13	25.73
40.	7.97	31.57	24.61	135.	8.71	33.15	25.74
45.	7.99	31.58	24.62	140.	8.66	33.24	25.81
50.	8.01	31.66	24.68	145.	8.54	33.34	25.91
55.	8.03	31.67	24.68	150.	8.50	33.37	25.95
60.	8.04	31.72	24.72	155.	8.46	33.48	26.04
65.	8.06	31.76	24.75	160.	8.43	33.51	26.06
70.	8.09	31.87	24.83	165.	8.43	33.51	26.07
75.	8.15	32.01	24.93	170.	8.42	33.51	26.07
80.	8.17	32.04	24.95	175.	8.43	33.52	26.07
85.	8.19	32.08	24.98	180.	8.42	33.52	26.07



REFERENCE NO. 73- 7-177 STN- D DATE 21/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 22.0  
 RESULTS OF STD CAST 47 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA II	PCT EN	SOUND VEL
0	8.06	31.61	24.63	331.6	0.0	0.0	1479.
10	8.06	31.62	24.64	331.7	0.33	0.02	1479.
20	8.06	31.62	24.64	331.6	0.66	0.07	1479.
30	8.06	31.62	24.64	331.7	0.99	0.15	1479.
50	8.04	31.62	24.64	331.8	1.66	0.42	1480.
75	8.09	31.81	24.79	318.4	2.48	0.94	1480.
100	8.21	32.27	25.13	286.4	3.22	1.61	1482.
125	8.32	32.59	25.36	264.2	3.91	2.40	1483.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.06	31.61	24.63	75.	8.09	31.81	24.79
5.	8.06	31.61	24.64	80.	8.16	32.00	24.93
10.	8.06	31.62	24.64	85.	8.20	32.10	25.00
15.	8.13	31.62	24.61	90.	8.20	32.14	25.03
20.	8.13	31.56	24.58	95.	8.20	32.18	25.06
25.	8.03	31.63	24.65	100.	8.21	32.27	25.13
30.	8.17	31.36	24.42	105.	8.23	32.23	25.17
35.	7.78	30.69	23.95	110.	8.24	32.37	25.20
40.	7.93	31.64	24.67	115.	8.24	32.40	25.23
45.	8.05	31.51	24.55	120.	8.27	32.46	25.26
50.	8.05	31.41	24.47	125.	8.32	32.59	25.36
55.	8.02	31.69	24.70	130.	8.38	32.81	25.52
60.	8.06	31.71	24.71	135.	8.38	32.83	25.54
65.	7.99	31.74	24.75	140.	8.39	32.84	25.55

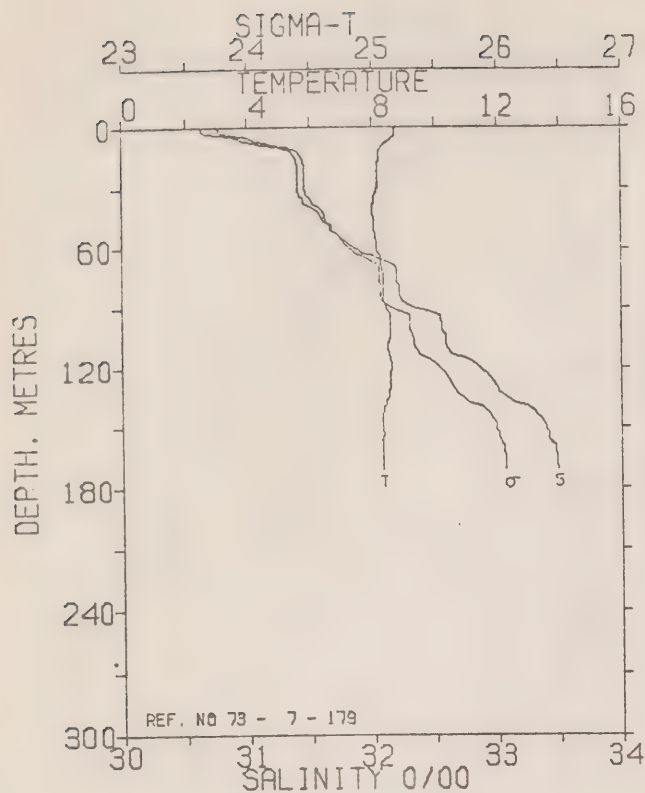


REFERENCE NO. 73- 7-178 STN- A DATE 21/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 23.0  
 RESULTS OF STD CAST 100 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA II	PCT EN	SOUND VEL
0	8.26	31.03	24.15	377.5	0.0	0.0	1479.
10	8.23	31.05	24.17	376.1	0.38	0.02	1479.
20	7.90	31.39	24.48	346.5	0.74	0.07	1478.
30	7.90	31.43	24.51	343.7	1.08	0.16	1478.
50	7.97	31.53	24.58	337.6	1.76	0.44	1479.
75	8.16	31.91	24.85	311.9	2.58	0.56	1481.
100	8.34	32.45	25.25	274.8	3.32	1.62	1483.
125	8.52	33.08	25.71	231.3	3.94	2.22	1484.
150	8.48	33.43	25.99	205.3	4.49	3.10	1485.
175	8.37	33.51	26.07	197.9	4.95	3.63	1485.
200	8.12	33.59	26.17	188.8	5.48	4.66	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.26	31.03	24.15	115.	8.45	32.56	25.63
5.	8.41	31.02	24.12	120.	8.49	33.04	25.69
10.	8.23	31.05	24.17	125.	8.52	33.08	25.71
15.	7.99	31.22	24.34	130.	8.54	33.11	25.73
20.	7.90	31.39	24.48	135.	8.57	33.17	25.77
25.	7.90	31.41	24.50	140.	8.58	33.27	25.85
30.	7.90	31.43	24.51	145.	8.54	33.37	25.94
35.	7.94	31.47	24.54	150.	8.48	33.43	25.99
40.	7.94	31.50	24.56	155.	8.44	33.47	26.03
45.	7.96	31.51	24.57	160.	8.42	33.48	26.04
50.	7.97	31.53	24.58	165.	8.43	33.48	26.04
55.	7.97	31.59	24.63	170.	8.40	33.49	26.05
60.	8.00	31.62	24.65	175.	8.27	33.51	26.07
65.	8.06	31.75	24.74	180.	8.36	33.52	26.08
70.	8.11	31.82	24.79	185.	8.34	33.53	26.09
75.	8.16	31.91	24.85	190.	8.33	33.54	26.10
80.	8.19	31.96	24.89	195.	8.28	33.56	26.13
85.	8.27	32.13	25.01	200.	8.12	33.59	26.17
90.	8.27	32.14	25.02	205.	7.98	33.64	26.23
95.	8.30	32.23	25.08	210.	7.89	33.66	26.26
100.	8.34	32.45	25.25	215.	7.85	33.67	26.27
105.	8.43	32.68	25.41	220.	7.81	33.67	26.28

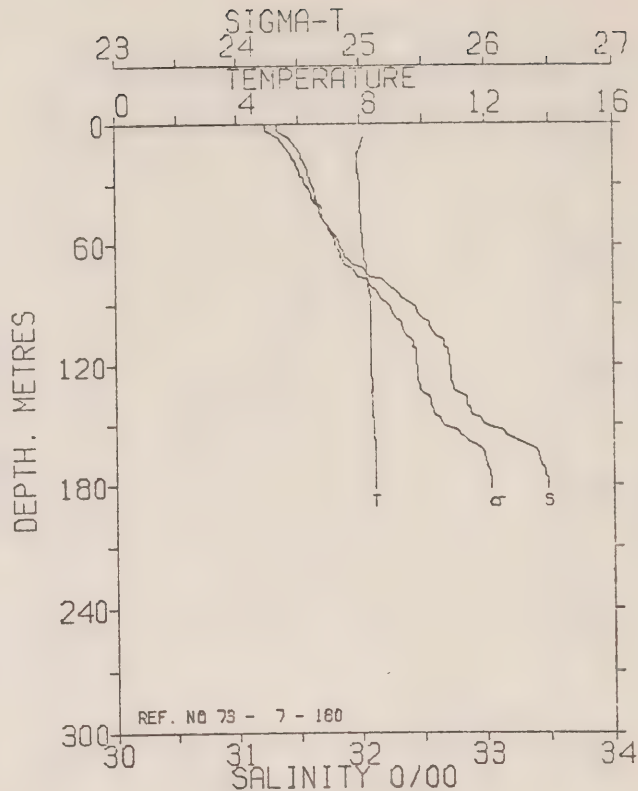




REFERENCE NO. 73- 7-179 STN- B DATE 22/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 0.1  
 RESULTS OF STD CAST 84 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.71	30.63	23.77	413.6	0.0	0.0	1480.
10	8.30	31.23	24.30	363.6	0.39	0.02	1479.
20	8.17	31.40	24.45	349.4	0.75	0.07	1479.
30	8.14	31.40	24.46	349.2	1.10	0.16	1479.
50	8.06	31.66	24.67	325.2	1.78	0.44	1480.
75	8.31	32.19	25.05	293.2	2.55	0.93	1482.
100	8.53	32.56	25.30	269.8	3.26	1.56	1483.
125	8.54	32.95	25.61	241.3	3.90	2.30	1484.
150	8.29	33.39	25.99	205.2	4.46	3.08	1484.

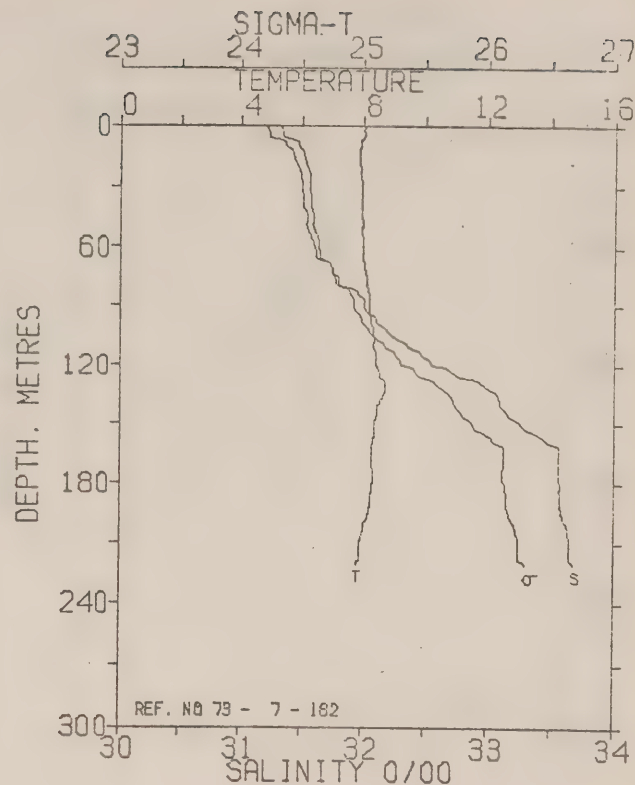
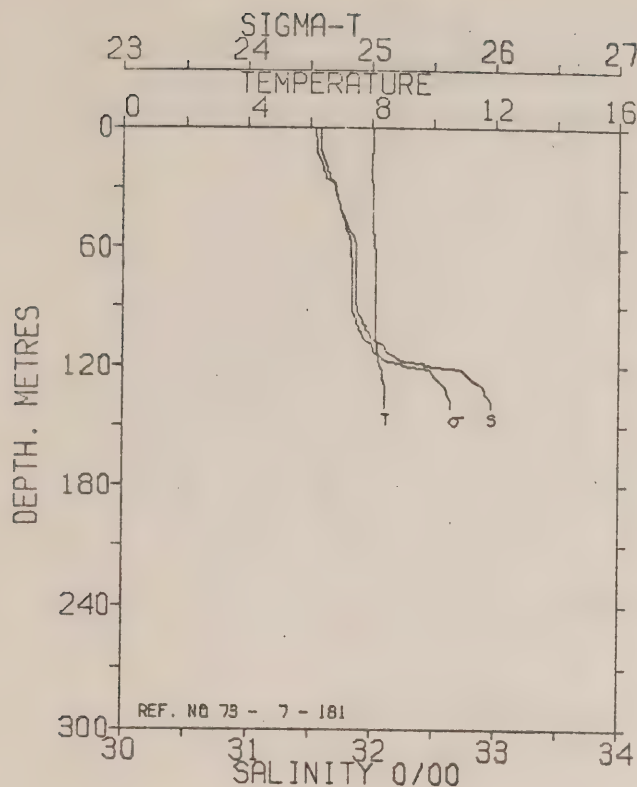
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.71	30.63	23.77	85.	8.35	32.23	25.07
5.	8.65	30.92	24.01	90.	8.44	32.27	25.17
10.	8.30	31.23	24.30	95.	8.53	32.55	25.29
15.	8.21	31.38	24.43	100.	8.53	32.52	25.28
20.	8.17	31.40	24.45	105.	8.52	32.59	25.33
25.	8.21	31.40	24.44	110.	8.49	32.61	25.35
30.	8.14	31.40	24.46	115.	8.56	32.76	25.46
35.	8.03	31.44	24.50	120.	8.56	32.67	25.54
40.	7.98	31.52	24.57	125.	8.54	32.95	25.61
45.	8.01	31.58	24.62	130.	8.52	33.00	25.65
50.	8.06	31.66	24.67	135.	8.45	33.08	25.73
55.	8.10	31.75	24.74	140.	8.32	33.27	25.69
60.	8.14	31.67	24.82	145.	8.25	33.35	25.96
65.	8.25	32.07	24.97	150.	8.29	33.39	25.99
70.	8.30	32.18	25.05	155.	8.28	33.41	26.01
75.	8.31	32.19	25.05	160.	8.30	33.47	26.05
80.	8.34	32.21	25.06	165.	8.29	33.47	26.05



REFERENCE NO. 73- 7-180 STN- C DATE 22/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 1.1  
 RESULTS OF STD CAST 93 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA C	PCT EN	SOUND VEL
0	8.13	31.23	24.33	360.8	0.0	0.0	1479.
10	8.03	31.37	24.45	349.5	0.36	0.02	1479.
20	7.93	31.48	24.55	340.1	0.70	0.07	1478.
30	7.96	31.55	24.60	335.6	1.04	0.16	1479.
50	8.04	31.73	24.73	323.8	1.70	0.43	1480.
75	8.20	32.06	24.97	301.3	2.48	0.53	1481.
100	8.36	32.55	25.32	267.6	3.19	1.55	1483.
125	8.36	32.72	25.46	255.5	3.84	2.29	1483.
150	8.41	32.99	25.66	236.3	4.46	3.16	1484.
175	8.47	33.47	26.03	202.3	4.95	4.04	1486.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.13	31.23	24.33	95.	8.36	32.47	25.26
5.	8.11	31.28	24.37	100.	8.36	32.55	25.32
10.	8.03	31.37	24.45	105.	8.36	32.59	25.36
15.	7.92	31.43	24.51	110.	8.36	32.67	25.42
20.	7.93	31.48	24.55	115.	8.36	32.70	25.44
25.	7.93	31.51	24.57	120.	8.36	32.71	25.45
30.	7.96	31.55	24.60	125.	8.36	32.72	25.46
35.	7.98	31.60	24.63	130.	8.36	32.74	25.47
40.	8.01	31.64	24.66	135.	8.36	32.81	25.53
45.	8.02	31.67	24.69	140.	8.37	32.86	25.56
50.	8.04	31.73	24.73	145.	8.37	32.89	25.59
55.	8.07	31.79	24.77	150.	8.41	32.99	25.66
60.	8.09	31.83	24.80	155.	8.43	33.16	25.79
65.	8.11	31.87	24.83	160.	8.47	33.23	25.92
70.	8.17	31.93	24.87	165.	8.47	33.41	25.98
75.	8.20	32.06	24.97	170.	8.47	33.44	26.00
80.	8.26	32.22	25.08	175.	8.47	33.47	26.03
85.	8.31	32.31	25.14	180.	8.46	33.49	26.04



REFERENCE NO. 73-7-181 STN- D DATE 22/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 2.1  
 RESULTS OF STD CAST 55 POINTS TAKEN FROM ANALOG TRACE

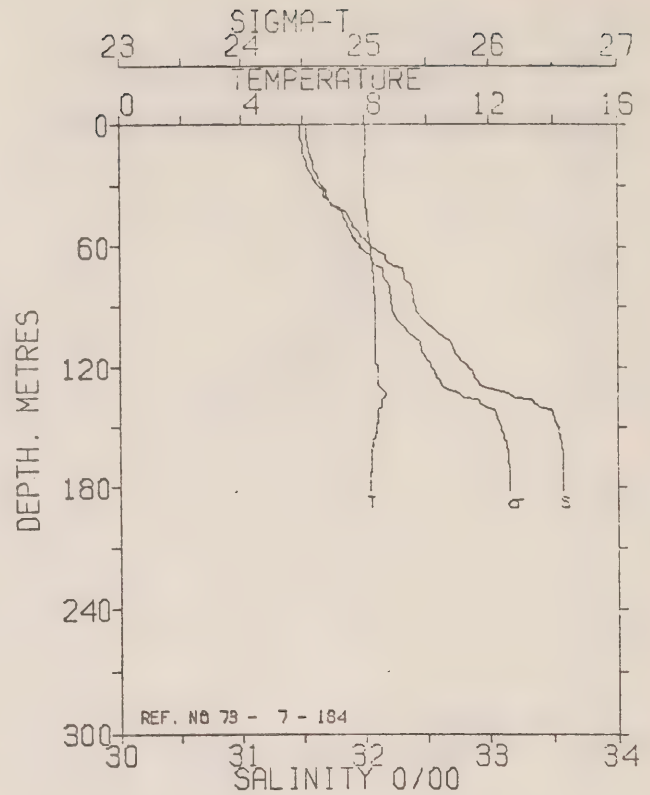
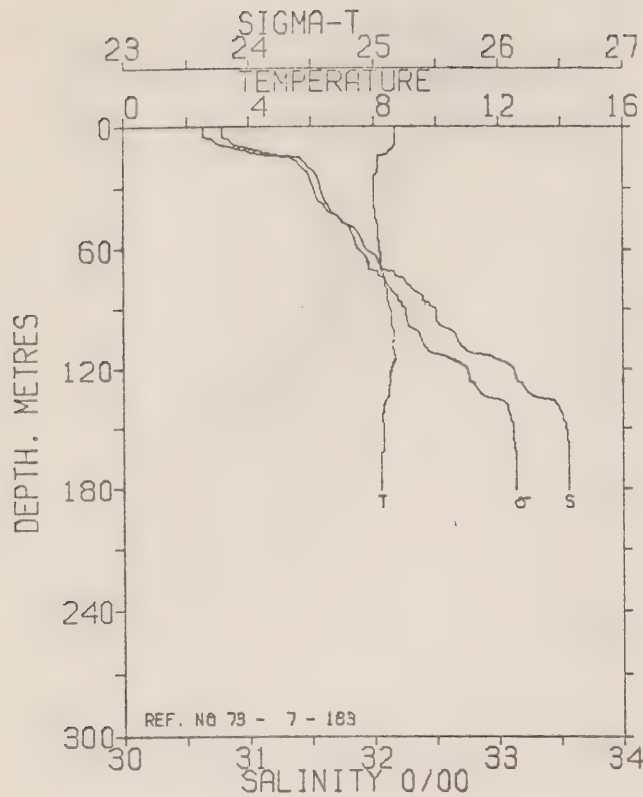
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.06	31.54	24.58	336.7	0.0	0.0	1479.
10	8.06	31.55	24.58	336.6	0.34	0.02	1479.
20	7.99	31.60	24.63	332.1	0.67	0.07	1479.
30	8.03	31.70	24.71	325.2	1.00	0.15	1479.
50	8.06	31.81	24.79	318.1	1.64	0.41	1480.
75	8.10	31.87	24.83	314.1	2.43	0.52	1480.
100	8.12	31.95	24.89	308.9	3.21	1.61	1481.
125	8.35	32.78	25.50	251.1	3.94	2.44	1483.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.06	31.54	24.58	75.	8.10	31.87	24.83
5.	8.06	31.55	24.58	80.	8.09	31.86	24.82
10.	8.16	31.55	24.57	85.	8.12	31.85	24.81
15.	8.00	31.57	24.61	90.	8.12	31.85	24.81
20.	7.99	31.60	24.63	95.	8.12	31.92	24.87
25.	7.99	31.63	24.66	100.	8.12	31.95	24.89
30.	8.03	31.70	24.71	105.	8.13	31.59	24.92
35.	8.03	31.71	24.71	110.	8.16	32.10	25.00
40.	8.05	31.75	24.74	115.	8.18	32.19	25.07
45.	8.06	31.78	24.76	120.	8.25	32.43	25.24
50.	8.06	31.81	24.79	125.	8.35	32.78	25.50
55.	8.08	31.85	24.82	130.	8.39	32.50	25.59
60.	8.10	31.87	24.83	135.	8.42	32.64	25.62
65.	8.10	31.87	24.83	140.	8.42	32.97	25.64

REFERENCE NO. 73-7-182 STN- A DATE 22/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 3.1  
 RESULTS OF STD CAST 122 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.04	31.20	24.32	361.8	0.0	0.0	1478.
10	7.89	31.36	24.46	348.4	0.36	0.02	1478.
20	7.89	31.46	24.54	341.2	0.70	0.07	1478.
30	7.94	31.50	24.56	339.1	1.04	0.16	1479.
50	7.96	31.54	24.59	336.4	1.72	0.43	1479.
75	8.12	31.79	24.77	320.2	2.54	0.96	1480.
100	8.29	32.15	25.02	296.6	3.31	1.64	1482.
125	8.56	32.74	25.44	257.1	4.00	2.44	1484.
150	8.38	33.26	25.87	216.3	4.59	3.25	1485.
175	8.31	33.56	26.12	193.3	5.08	4.07	1485.
200	8.03	33.63	26.22	184.5	5.56	4.58	1484.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.04	31.20	24.32	115.	8.42	32.48	25.26
5.	8.03	31.23	24.34	120.	8.44	32.55	25.31
10.	7.89	31.36	24.46	125.	8.56	32.74	25.44
15.	7.80	31.43	24.51	130.	8.73	32.57	25.59
20.	7.89	31.46	24.54	135.	8.62	33.08	25.70
25.	7.92	31.49	24.56	140.	8.45	33.10	25.73
30.	7.94	31.50	24.56	145.	8.42	33.16	25.79
35.	7.94	31.51	24.57	150.	8.38	33.26	25.87
40.	7.95	31.49	24.55	155.	8.26	33.39	25.98
45.	7.95	31.54	24.59	160.	8.30	33.50	26.07
50.	7.96	31.54	24.59	165.	8.29	33.56	26.13
55.	7.96	31.58	24.62	170.	8.29	33.56	26.13
60.	7.97	31.60	24.64	175.	8.31	33.56	26.12
65.	7.97	31.61	24.65	180.	8.30	33.57	26.13
70.	8.06	31.73	24.73	185.	8.26	33.58	26.14
75.	8.12	31.79	24.77	190.	8.24	33.58	26.15
80.	8.13	31.84	24.80	195.	8.17	33.59	26.16
85.	8.18	31.98	24.90	200.	8.03	33.63	26.22
90.	8.19	32.01	24.93	205.	7.98	33.64	26.23
95.	8.24	32.09	24.98	210.	7.92	33.65	26.25
100.	8.29	32.15	25.02	215.	7.92	33.65	26.25
105.	8.33	32.23	25.08	220.	7.81	33.68	26.29



REFERENCE NO. 73- 7-183 STN- B DATE 22/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 4.0  
 RESULTS OF STD CAST 98 POINTS TAKEN FROM ANALOG TRACE

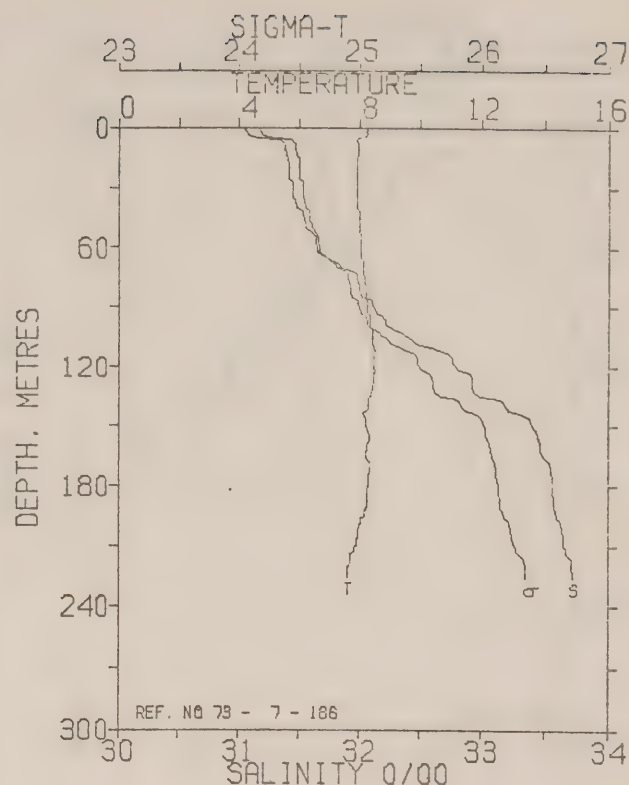
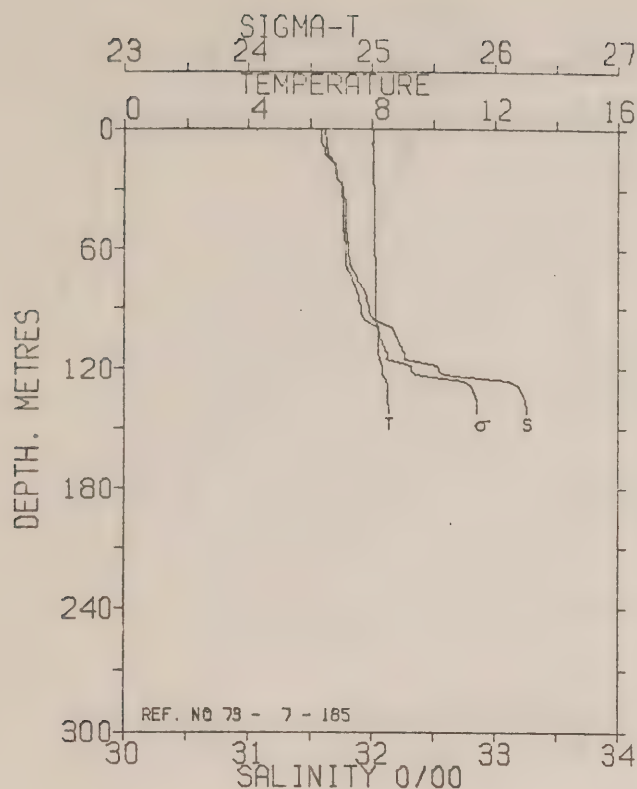
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.66	30.63	23.78	412.8	0.0	0.0	1480.
10	8.62	30.83	23.94	397.9	0.41	0.02	1480.
20	8.10	31.43	24.48	346.6	0.77	0.08	1479.
30	7.97	31.52	24.57	338.2	1.12	0.16	1479.
50	8.12	31.85	24.81	316.0	1.78	0.43	1480.
75	8.33	32.24	25.09	289.7	2.54	0.52	1482.
100	8.62	32.62	25.34	266.3	3.24	1.54	1484.
125	8.50	33.14	25.77	226.2	3.85	2.24	1484.
150	8.29	33.55	26.11	193.6	4.37	2.56	1485.
175	8.20	33.56	26.14	191.7	4.85	3.76	1485.

REFERENCE NO. 73- 7-184 STN- C DATE 22/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 5.0  
 RESULTS OF STD CAST 93 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.06	31.47	24.52	341.9	0.0	0.0	1479.
10	8.05	31.49	24.54	340.6	0.34	0.02	1479.
20	7.98	31.54	24.58	336.7	0.68	0.07	1479.
30	7.99	31.63	24.66	330.1	1.01	0.15	1479.
50	8.10	31.91	24.86	311.2	1.66	0.41	1480.
75	8.28	32.31	25.15	283.8	2.40	0.89	1482.
100	8.32	32.54	25.32	267.8	3.09	1.51	1483.
125	8.39	32.88	25.57	244.2	3.73	2.23	1484.
150	8.37	33.54	26.10	194.9	4.27	2.59	1485.
175	8.16	33.58	26.16	189.6	4.75	3.78	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.66	30.63	23.78	90.	8.52	32.49	25.25
5.	8.66	30.63	23.78	95.	8.54	32.50	25.26
10.	8.62	30.83	23.94	100.	8.62	32.62	25.34
15.	8.12	31.32	24.40	105.	8.59	32.67	25.38
20.	8.10	31.43	24.48	110.	8.55	32.73	25.43
25.	7.98	31.49	24.55	115.	8.65	33.00	25.63
30.	7.97	31.52	24.57	120.	8.53	33.12	25.74
35.	7.96	31.54	24.59	125.	8.50	33.14	25.77
40.	8.02	31.62	24.64	130.	8.46	33.22	25.83
45.	8.06	31.73	24.72	135.	8.38	33.36	25.96
50.	8.12	31.85	24.81	140.	8.29	33.50	26.07
55.	8.15	31.90	24.84	145.	8.26	33.52	26.10
60.	8.17	31.95	24.88	150.	8.29	33.55	26.11
65.	8.22	32.03	24.94	155.	8.29	33.55	26.12
70.	8.23	32.05	24.95	160.	8.29	33.56	26.13
75.	8.33	32.24	25.09	165.	8.20	33.56	26.14
80.	8.39	32.32	25.14	170.	8.20	33.56	26.14
85.	8.44	32.39	25.19	175.	8.20	33.56	26.14

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.06	31.47	24.52	95.	8.33	32.45	25.25
5.	8.05	31.47	24.52	100.	8.32	32.54	25.32
10.	8.05	31.49	24.54	105.	8.32	32.64	25.40
15.	8.00	31.50	24.56	110.	8.33	32.71	25.45
20.	7.98	31.54	24.58	115.	8.35	32.76	25.49
25.	7.98	31.58	24.62	120.	8.39	32.83	25.54
30.	7.99	31.63	24.66	125.	8.39	32.88	25.57
35.	8.01	31.67	24.68	130.	8.46	32.97	25.63
40.	8.04	31.74	24.73	135.	8.60	33.21	25.80
45.	8.09	31.86	24.83	140.	8.45	33.43	25.99
50.	8.10	31.91	24.86	145.	8.42	33.50	26.06
55.	8.13	31.97	24.90	150.	8.37	33.54	26.10
60.	8.19	32.06	24.96	155.	8.32	33.55	26.11
65.	8.23	32.17	25.05	160.	8.24	33.56	26.13
70.	8.24	32.23	25.09	165.	8.18	33.57	26.15
75.	8.28	32.31	25.15	170.	8.17	33.58	26.16
80.	8.31	32.38	25.20	175.	8.16	33.58	26.16
85.	8.31	32.39	25.20	180.	8.16	33.58	26.16



REFERENCE NO. 73- 7-185 STN- D DATE 22/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 6.0  
 RESULTS OF STD CAST 54 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.02	31.58	24.62	333.2	0.0	0.0	1479.
10	8.03	31.61	24.64	331.6	0.33	0.02	1479.
20	8.05	31.70	24.70	325.5	0.66	0.07	1479.
30	8.07	31.77	24.75	320.7	0.99	0.15	1479.
50	8.08	31.79	24.77	315.9	1.63	0.41	1480.
75	8.09	31.88	24.84	313.2	2.42	0.52	1480.
100	8.18	32.17	25.05	293.3	3.19	1.60	1482.
125	8.44	32.90	25.58	243.5	3.89	2.41	1484.

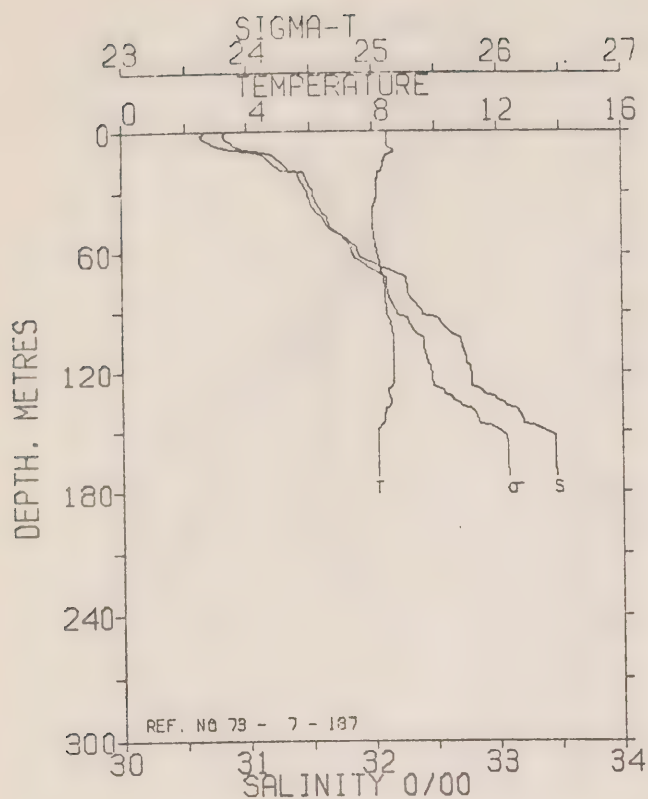
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.02	31.58	24.62	75.	8.09	31.68	24.84
5.	8.01	31.58	24.62	80.	8.12	31.93	24.88
10.	8.03	31.61	24.64	85.	8.13	31.95	24.89
15.	8.04	31.66	24.67	90.	8.13	31.98	24.91
20.	8.05	31.70	24.70	95.	8.14	32.01	24.93
25.	8.06	31.71	24.71	100.	8.18	32.17	25.05
30.	8.07	31.77	24.75	105.	8.19	32.20	25.07
35.	8.07	31.78	24.76	110.	8.21	32.24	25.11
40.	8.07	31.79	24.77	115.	8.23	32.27	25.12
45.	8.08	31.77	24.76	120.	8.31	32.53	25.32
50.	8.08	31.79	24.77	125.	8.44	32.60	25.58
55.	8.08	31.81	24.78	130.	8.50	33.20	25.81
60.	8.08	31.81	24.78	135.	8.51	33.24	25.84
65.	8.09	31.79	24.77	140.	8.52	33.25	25.85

REFERENCE NO. 73- 7-186 STN- A DATE 22/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 7.0  
 RESULTS OF STD CAST 118 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.24	31.03	24.15	377.2	0.0	0.0	1479.
10	7.95	31.38	24.47	347.6	0.26	0.02	1478.
20	7.90	31.41	24.50	345.0	0.71	0.07	1478.
30	7.91	31.45	24.53	342.4	1.05	0.16	1478.
50	7.99	31.56	24.60	335.7	1.73	0.44	1479.
75	8.15	31.98	24.91	306.9	2.54	0.55	1481.
100	8.36	32.25	25.09	289.9	3.29	1.62	1482.
125	8.46	32.92	25.60	242.4	3.55	2.37	1484.
150	8.18	33.41	26.02	202.2	4.51	3.16	1484.
175	8.29	33.56	26.12	193.2	5.01	3.97	1485.
200	7.97	33.63	26.23	183.3	5.48	4.88	1484.
225	7.61	33.72	26.35	171.8	5.93	5.84	1483.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.24	31.03	24.15	115.	8.47	32.76	25.47
5.	7.96	31.16	24.30	120.	8.45	32.79	25.50
10.	7.95	31.38	24.47	125.	8.46	32.92	25.60
15.	7.90	31.40	24.49	130.	8.43	32.93	25.61
20.	7.90	31.41	24.50	135.	8.32	32.59	25.67
25.	7.90	31.41	24.50	140.	8.30	33.20	25.84
30.	7.91	31.45	24.53	145.	8.18	33.35	25.98
35.	7.90	31.45	24.53	150.	8.18	33.41	26.02
40.	7.91	31.48	24.55	155.	8.33	33.45	26.03
45.	7.99	31.53	24.58	160.	8.24	33.47	26.06
50.	7.99	31.56	24.60	165.	8.19	33.49	26.09
55.	3.02	31.64	24.66	170.	8.31	33.55	26.11
60.	8.02	31.64	24.66	175.	8.29	33.56	26.12
65.	8.04	31.72	24.72	180.	8.27	33.57	26.13
70.	8.10	31.84	24.81	185.	8.26	33.57	26.14
75.	8.15	31.98	24.91	190.	8.24	33.58	26.15
80.	8.18	32.00	24.92	195.	8.14	33.60	26.18
85.	8.20	32.02	24.93	200.	7.97	33.63	26.23
90.	8.28	32.11	24.99	205.	7.92	33.64	26.25
95.	8.33	32.19	25.05	210.	7.86	33.66	26.26
100.	8.36	32.25	25.09	215.	7.70	33.70	26.32
105.	8.43	32.41	25.20	220.	7.62	33.71	26.34
110.	8.47	32.59	25.34	225.	7.61	33.72	26.35

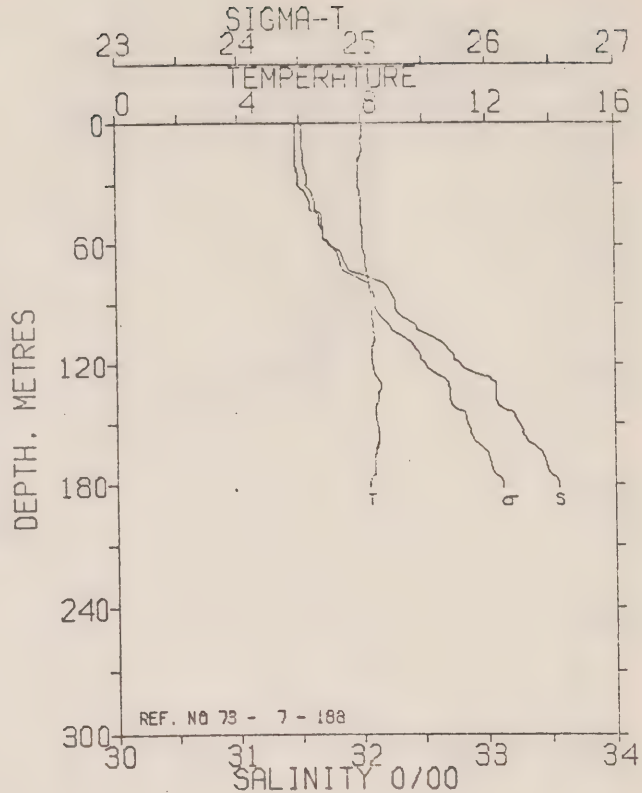




REFERENCE NO. 73- 7-187 STN- B DATE 22/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 8.0  
 RESULTS OF STD CAST 87 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA	SVA	DELTA	POT EN	SOUND
			T	D	D		VEL
0	8.47	30.65	23.82	408.8	0.0	0.0	1479.
10	8.67	30.99	24.06	386.6	0.40	0.02	1480.
20	8.15	31.39	24.45	349.9	0.77	0.08	1479.
30	8.11	31.47	24.52	343.2	1.12	0.16	1479.
50	8.02	31.72	24.72	324.2	1.79	0.44	1480.
75	8.36	32.27	25.10	288.1	2.56	0.52	1482.
100	8.60	32.62	25.34	266.3	3.26	1.55	1484.
125	8.61	32.79	25.47	254.2	3.90	2.29	1484.
150	8.13	33.39	26.02	202.6	4.48	3.09	1484.

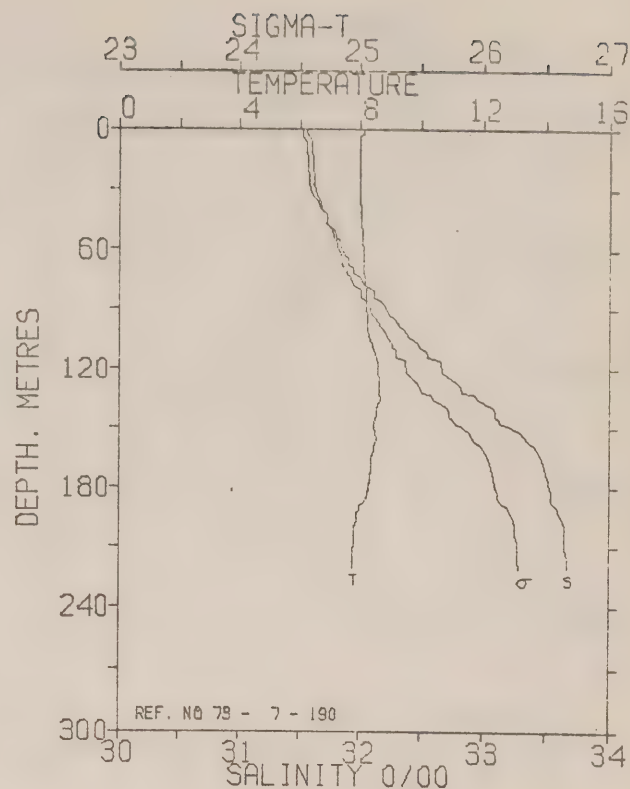
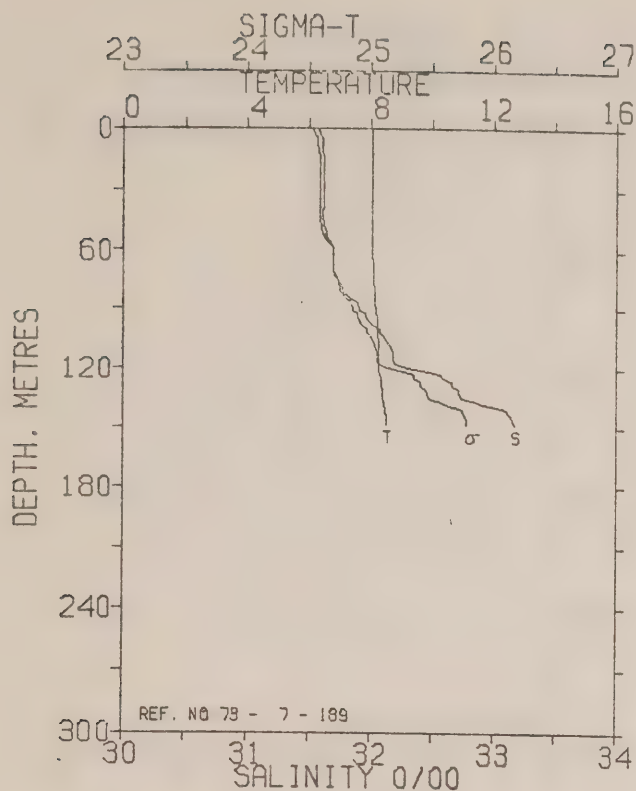
DEPTH	TEMP	SAL	SIGMA	DEPTH	TEMP	SAL	SIGMA
			T				T
0.	8.47	30.65	23.82	85.	8.39	32.33	25.15
5.	8.46	30.70	23.86	90.	8.43	32.39	25.19
10.	8.67	30.99	24.06	95.	8.54	32.54	25.29
15.	8.32	31.18	24.26	100.	8.60	32.62	25.34
20.	8.15	31.39	24.45	105.	8.64	32.70	25.40
25.	8.13	31.43	24.48	110.	8.64	32.72	25.42
30.	8.11	31.47	24.52	115.	8.64	32.75	25.44
35.	8.08	31.50	24.54	120.	8.64	32.78	25.46
40.	7.97	31.54	24.59	125.	8.61	32.79	25.47
45.	7.99	31.61	24.64	130.	8.46	32.88	25.56
50.	8.02	31.72	24.72	135.	8.57	33.06	25.69
55.	8.07	31.83	24.80	140.	8.31	33.18	25.82
60.	8.15	31.89	24.83	145.	8.27	33.20	25.85
65.	8.19	32.03	24.94	150.	8.13	33.39	26.02
70.	8.28	32.17	25.04	155.	8.12	33.46	26.07
75.	8.36	32.27	25.10	160.	8.11	33.46	26.07
80.	8.38	32.28	25.11	165.	8.11	33.46	26.07



REFERENCE NO. 73- 7-188 STN- C DATE 22/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 9.0  
 RESULTS OF STD CAST 80 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA	SVA	DELTA	PCT EN	SOUND
			T	D	D		VEL
0	8.03	31.46	24.52	342.3	0.0	0.0	1478.
10	8.01	31.46	24.52	342.5	0.34	0.02	1479.
20	7.92	31.46	24.53	341.5	0.68	0.07	1478.
30	7.93	31.49	24.56	339.6	1.02	0.16	1479.
50	8.01	31.66	24.67	328.6	1.69	0.43	1479.
75	8.18	32.01	24.93	304.7	2.49	0.54	1481.
100	8.37	32.43	25.23	276.7	3.21	1.58	1483.
125	8.43	32.93	25.61	241.2	3.86	2.32	1484.
150	8.50	33.25	25.85	218.4	4.43	3.12	1485.
175	8.37	33.51	26.07	197.9	4.95	3.58	1485.

DEPTH	TEMP	SAL	SIGMA	DEPTH	TEMP	SAL	SIGMA
			T				T
0.	8.03	31.46	24.52	95.	8.33	32.32	25.14
5.	8.03	31.46	24.52	100.	8.37	32.43	25.23
10.	8.01	31.46	24.52	105.	8.38	32.52	25.30
15.	7.95	31.46	24.53	110.	8.36	32.66	25.41
20.	7.92	31.46	24.53	115.	8.34	32.75	25.48
25.	7.92	31.48	24.55	120.	8.35	32.79	25.51
30.	7.93	31.49	24.56	125.	8.43	32.63	25.61
35.	7.95	31.55	24.60	130.	8.60	33.08	25.70
40.	7.98	31.58	24.62	135.	8.56	33.08	25.71
45.	8.00	31.66	24.68	140.	8.49	33.09	25.72
50.	8.01	31.66	24.67	145.	8.47	33.22	25.83
55.	8.03	31.69	24.70	150.	8.50	33.25	25.85
60.	8.04	31.75	24.74	155.	8.53	33.29	25.87
65.	8.09	31.84	24.81	160.	8.51	33.36	25.94
70.	8.10	31.86	24.82	165.	8.43	33.44	26.01
75.	8.18	32.01	24.93	170.	8.42	33.47	26.03
80.	8.26	32.20	25.06	175.	8.37	33.51	26.07
85.	8.28	32.24	25.10	180.	8.27	33.56	26.13



REFERENCE NO. 73- 7-189 STN- D DATE 22/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 10.0  
 RESULTS OF STD CAST 56 POINTS TAKEN FROM ANALCG TRACE

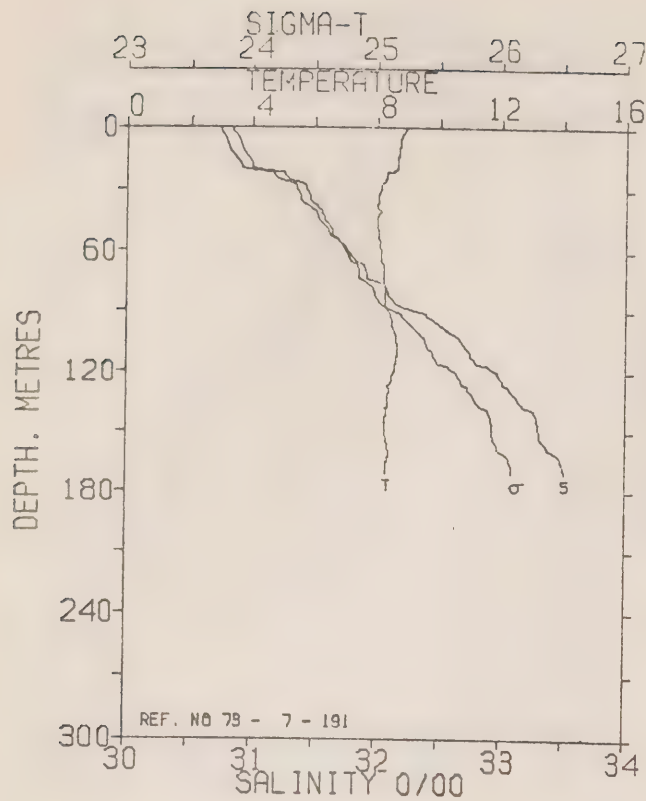
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT-EN	SOUND VEL
0	8.06	31.53	24.57	337.5	0.0	0.0	1479.
10	8.04	31.57	24.60	334.7	0.34	0.02	1479.
20	8.04	31.58	24.61	334.2	0.67	0.07	1479.
30	8.04	31.58	24.61	334.5	1.00	0.15	1479.
50	8.04	31.60	24.62	333.5	1.67	0.43	1479.
75	8.08	31.73	24.72	324.2	2.49	0.95	1480.
100	8.22	32.07	24.97	301.4	3.28	1.65	1482.
125	8.31	32.58	25.35	265.4	4.01	2.48	1483.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.06	31.53	24.57	75.	8.08	31.73	24.72
5.	8.04	31.56	24.60	80.	8.10	31.76	24.75
10.	8.04	31.57	24.60	85.	8.11	31.84	24.81
15.	8.04	31.58	24.61	90.	8.15	31.90	24.84
20.	8.04	31.58	24.61	95.	8.18	31.97	24.89
25.	8.04	31.58	24.61	100.	8.22	32.07	24.97
30.	8.04	31.58	24.61	105.	8.22	32.11	25.00
35.	8.04	31.55	24.59	110.	8.23	32.16	25.04
40.	8.04	31.50	24.55	115.	8.23	32.18	25.05
45.	7.92	31.61	24.65	120.	8.23	32.29	25.14
50.	8.06	31.59	24.61	125.	8.31	32.58	25.35
55.	8.06	31.64	24.65	130.	8.36	32.68	25.43
60.	8.06	31.69	24.69	135.	8.36	32.74	25.47
65.	8.07	31.69	24.70	140.	8.47	33.07	25.71
70.	8.07	31.69	24.69	145.	8.50	33.14	25.77

REFERENCE NO. 73- 7-190 STN- A DATE 22/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 11.0  
 RESULTS OF STD CAST 106 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT-EN	SOUND VEL
0	8.12	31.51	24.55	335.8	0.0	0.0	1479.
10	8.01	31.55	24.59	335.8	0.34	0.02	1479.
20	7.99	31.56	24.60	335.0	0.67	0.07	1479.
30	7.98	31.59	24.63	332.9	1.01	0.15	1479.
50	8.08	31.79	24.77	319.9	1.66	0.42	1480.
75	8.16	32.01	24.93	304.9	2.45	0.92	1481.
100	8.28	32.36	25.19	280.7	3.18	1.57	1482.
125	8.62	32.74	25.43	258.1	3.85	2.34	1484.
150	8.48	33.24	25.84	219.5	4.45	3.18	1485.
175	8.31	33.51	26.08	197.0	4.96	4.02	1485.
200	7.84	33.65	26.26	180.5	5.43	4.53	1484.

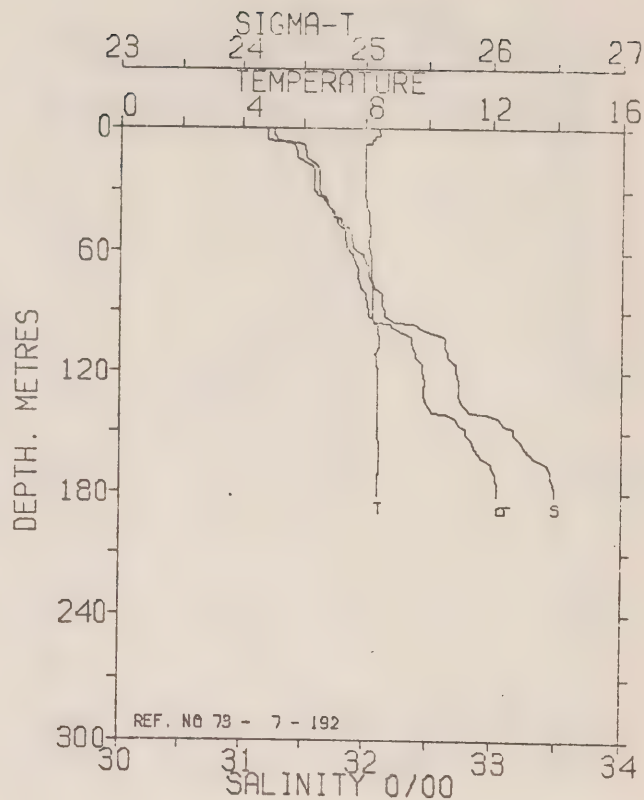
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.12	31.51	24.55	115.	8.57	32.65	25.37
5.	7.99	31.53	24.58	120.	8.60	32.66	25.38
10.	8.01	31.55	24.59	125.	8.62	32.74	25.43
15.	8.01	31.56	24.60	130.	8.64	32.82	25.49
20.	7.99	31.56	24.60	135.	8.67	32.86	25.59
25.	7.99	31.57	24.61	140.	8.56	32.09	25.71
30.	7.98	31.59	24.63	145.	8.50	33.12	25.75
35.	8.00	31.63	24.66	150.	8.48	33.24	25.84
40.	8.02	31.67	24.68	155.	8.52	33.24	25.92
45.	8.05	31.72	24.72	160.	8.45	33.41	25.98
50.	8.08	31.79	24.77	165.	8.38	33.46	26.03
55.	8.09	31.83	24.80	170.	8.35	33.49	26.06
60.	8.11	31.85	24.81	175.	8.31	33.51	26.08
65.	8.12	31.90	24.85	180.	8.30	33.53	26.10
70.	8.12	31.94	24.88	185.	8.21	33.54	26.12
75.	8.16	32.01	24.93	190.	7.98	33.59	26.20
80.	8.19	32.11	25.01	195.	7.88	33.63	26.24
85.	8.20	32.15	25.03	200.	7.84	33.65	26.26
90.	8.22	32.22	25.08	205.	7.82	33.65	26.26
95.	8.26	32.29	25.14	210.	7.80	33.66	26.27
100.	8.28	32.36	25.19	215.	7.78	33.66	26.28
105.	8.31	32.44	25.24	220.	7.78	33.67	26.29



REFERENCE NO. 73-7-191 STN- B DATE 22/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 12.1  
 RESULTS OF STD CAST 111 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.88	30.73	23.83	408.6	0.0	0.0	1481.
10	8.67	30.80	23.91	400.8	0.40	0.02	1480.
20	8.62	30.91	24.00	392.1	0.80	0.08	1480.
30	8.10	31.35	24.42	352.4	1.17	0.17	1479.
50	8.02	31.60	24.63	332.7	1.85	0.45	1479.
75	8.22	31.59	24.91	306.8	2.65	0.56	1481.
100	8.54	32.57	25.31	268.6	3.37	1.60	1483.
125	8.44	33.01	25.67	235.4	4.01	2.33	1484.
150	8.27	33.30	25.93	211.3	4.56	3.10	1484.

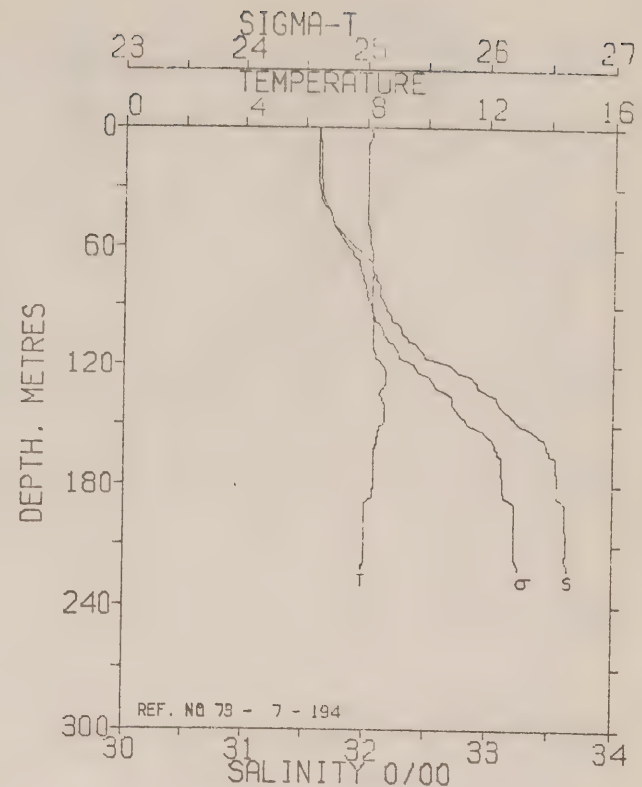
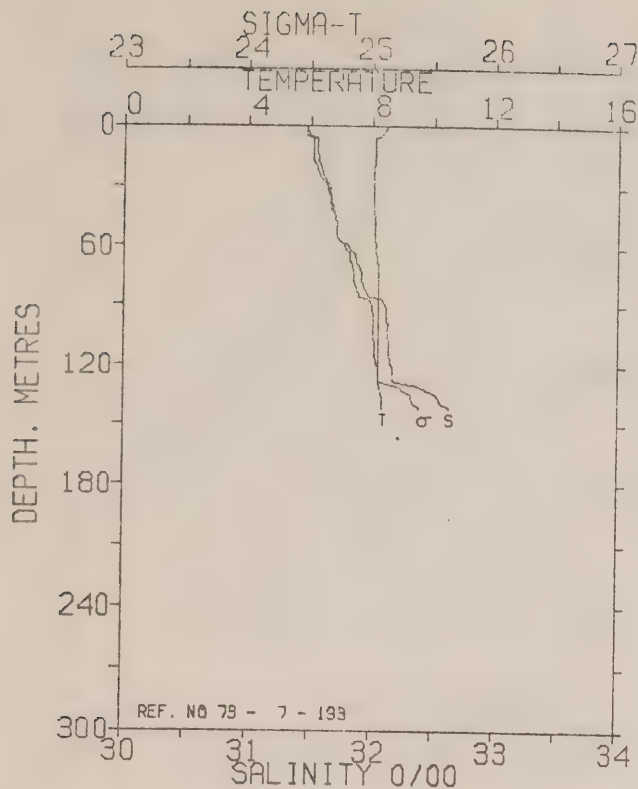
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.88	30.73	23.83	90.	8.34	32.29	25.12
5.	8.71	30.77	23.88	95.	8.46	32.46	25.24
10.	8.67	30.80	23.91	100.	8.54	32.57	25.31
15.	8.65	30.86	23.96	105.	8.60	32.67	25.38
20.	8.62	30.91	24.00	110.	8.61	32.75	25.44
25.	8.27	31.20	24.28	115.	8.57	32.78	25.48
30.	8.10	31.35	24.42	120.	8.52	32.57	25.63
35.	8.02	31.38	24.46	125.	8.44	33.01	25.67
40.	8.06	31.48	24.53	130.	8.36	33.09	25.74
45.	8.00	31.53	24.58	135.	8.35	33.15	25.79
50.	8.02	31.60	24.63	140.	8.28	33.27	25.89
55.	8.07	31.69	24.69	145.	8.27	33.29	25.92
60.	8.11	31.77	24.75	150.	8.27	33.30	25.93
65.	8.13	31.82	24.79	155.	8.31	33.34	25.95
70.	8.17	31.90	24.85	160.	8.36	33.40	25.99
75.	8.22	31.99	24.91	165.	8.30	33.48	26.06
80.	8.26	32.08	24.97	170.	8.29	33.51	26.09



REFERENCE NO. 73-7-192 STN- C DATE 22/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 13.1  
 RESULTS OF STD CAST 105 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SCUND VEL
0	8.44	31.19	24.25	368.1	0.0	0.0	1480.
10	7.98	31.43	24.51	344.1	0.36	0.02	1478.
20	7.99	31.58	24.62	333.5	0.70	0.07	1479.
30	8.01	31.59	24.62	333.3	1.03	0.15	1479.
50	8.16	31.89	24.83	313.5	1.68	0.42	1480.
75	8.23	32.05	24.95	302.4	2.45	0.51	1481.
100	8.42	32.50	25.27	272.6	3.18	1.56	1483.
125	8.41	32.75	25.47	254.2	3.83	2.30	1484.
150	8.43	33.17	25.80	223.3	4.44	3.16	1485.
175	8.43	33.48	26.04	201.0	4.97	4.03	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.44	31.19	24.25	95.	8.20	32.23	25.08
5.	8.28	31.19	24.27	100.	8.42	32.50	25.27
10.	7.98	31.43	24.51	105.	8.48	32.64	25.38
15.	7.98	31.47	24.53	110.	8.38	32.65	25.40
20.	7.99	31.58	24.62	115.	8.37	32.70	25.44
25.	7.99	31.58	24.62	120.	8.40	32.73	25.46
30.	8.01	31.59	24.62	125.	8.41	32.75	25.47
35.	8.01	31.67	24.69	130.	8.42	32.75	25.47
40.	8.09	31.74	24.73	135.	8.42	32.76	25.48
45.	8.14	31.81	24.77	140.	8.39	32.83	25.53
50.	8.16	31.89	24.83	145.	8.41	33.07	25.73
55.	8.14	31.89	24.84	150.	8.43	33.17	25.80
60.	8.16	31.95	24.88	155.	8.44	33.23	25.85
65.	8.20	32.00	24.92	160.	8.46	33.28	25.88
70.	8.22	32.03	24.94	165.	8.46	33.40	25.98
75.	8.23	32.05	24.95	170.	8.44	33.46	26.02
80.	8.25	32.11	25.00	175.	8.43	33.48	26.04
85.	8.27	32.14	25.02	180.	8.44	33.49	26.05



REFERENCE NO. 73- 7-193 STN- D DATE 22/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 14.0  
 RESULTS OF STD CAST 63 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA E	POT EN	SOUND VEL
0	8.49	31.46	24.45	348.7	0.0	0.0	1480.
10	8.08	31.51	24.55	335.8	0.34	0.02	1479.
20	8.06	31.55	24.59	336.7	0.68	0.07	1479.
30	8.06	31.64	24.65	330.2	1.02	0.15	1479.
50	8.08	31.72	24.71	325.0	1.67	0.42	1480.
75	8.19	31.91	24.85	312.4	2.47	0.93	1481.
100	8.22	32.13	25.02	296.9	3.23	1.61	1482.
125	8.22	32.17	25.04	294.5	3.97	2.45	1482.

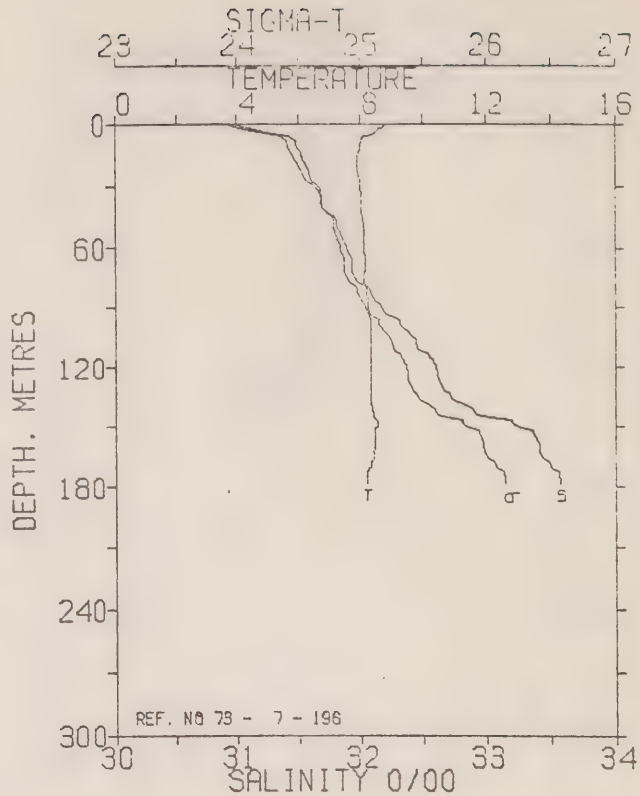
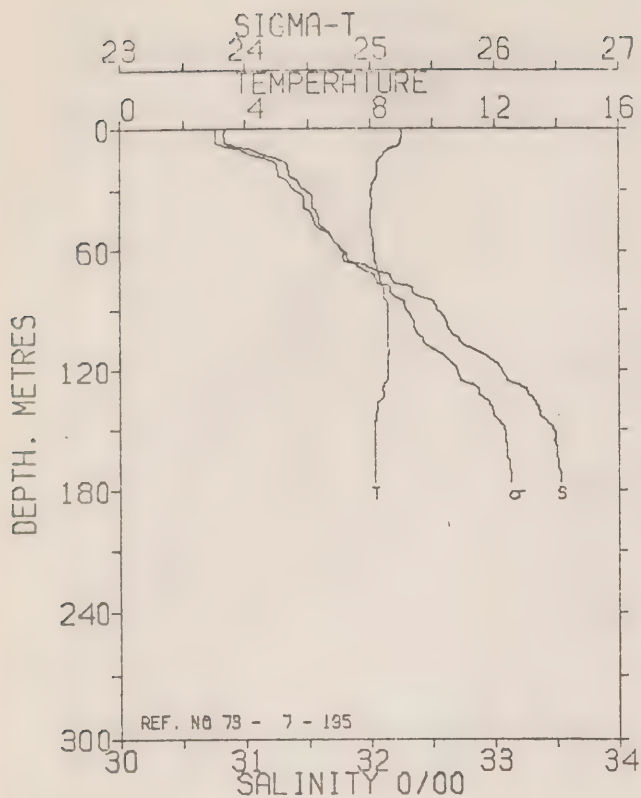
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.49	31.46	24.45	75.	8.19	31.91	24.85
5.	8.21	31.46	24.49	80.	8.20	31.92	24.86
10.	8.08	31.51	24.55	85.	8.22	31.97	24.89
15.	8.08	31.52	24.56	90.	8.23	32.10	24.99
20.	8.06	31.55	24.59	95.	8.22	32.12	25.01
25.	8.06	31.57	24.60	100.	8.22	32.13	25.02
30.	8.06	31.64	24.65	105.	8.22	32.13	25.02
35.	8.06	31.65	24.67	110.	8.22	32.14	25.02
40.	8.06	31.66	24.67	115.	8.22	32.14	25.02
45.	8.07	31.70	24.70	120.	8.22	32.15	25.03
50.	8.08	31.72	24.71	125.	8.22	32.17	25.04
55.	8.08	31.72	24.71	130.	8.24	32.30	25.15
60.	8.12	31.81	24.78	135.	8.30	32.53	25.31
65.	8.15	31.86	24.81	140.	8.32	32.58	25.35

REFERENCE NO. 73- 7-194 STN- A DATE 22/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 15.1  
 RESULTS OF STD CAST 100 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.14	31.60	24.61	333.4	0.0	0.0	1479.
10	8.04	31.60	24.63	332.5	0.32	0.02	1479.
20	8.03	31.60	24.63	332.6	0.67	0.07	1479.
30	8.03	31.61	24.64	331.7	1.00	0.15	1479.
50	8.08	31.76	24.74	322.0	1.65	0.42	1480.
75	8.22	32.08	24.98	300.1	2.43	0.91	1481.
100	8.27	32.27	25.12	287.2	3.17	1.57	1482.
125	8.66	32.82	25.49	252.7	3.85	2.35	1485.
150	8.57	33.25	25.84	219.4	4.44	3.17	1485.
175	8.29	33.56	26.12	193.3	4.93	4.00	1485.
200	8.00	33.63	26.23	183.7	5.41	4.50	1484.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.14	31.60	24.61	115.	8.32	32.48	25.28
5.	8.15	31.60	24.61	120.	8.57	32.69	25.40
10.	8.04	31.60	24.63	125.	8.66	32.82	25.49
15.	8.03	31.60	24.63	130.	8.65	32.52	25.57
20.	8.03	31.60	24.63	135.	8.47	33.04	25.69
25.	8.03	31.60	24.63	140.	8.60	33.10	25.71
30.	8.03	31.61	24.64	145.	8.64	33.18	25.78
35.	8.02	31.62	24.64	150.	8.57	33.25	25.84
40.	8.02	31.66	24.67	155.	8.39	33.40	25.99
45.	8.05	31.71	24.71	160.	8.33	33.48	26.06
50.	8.08	31.76	24.74	165.	8.28	33.50	26.08
55.	8.11	31.83	24.79	170.	8.29	33.55	26.12
60.	8.15	31.91	24.85	175.	8.29	33.56	26.12
65.	8.18	31.99	24.91	180.	8.28	33.56	26.13
70.	8.22	32.05	24.95	185.	8.23	33.56	26.13
75.	8.22	32.08	24.98	190.	8.01	33.63	26.22
80.	8.21	32.11	25.00	195.	8.00	33.64	26.23
85.	8.21	32.11	25.00	200.	8.00	33.64	26.21
90.	8.21	32.16	25.04	205.	8.10	33.59	26.16
95.	8.24	32.21	25.07	210.	8.19	33.66	26.26
100.	8.27	32.27	25.12	215.	7.89	33.66	26.26
105.	8.27	32.31	25.15	220.	7.89	33.65	26.26





REFERENCE NO. 73- 7-195 STN- B DATE 22/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 16.0  
 RESULTS OF STD CAST 106 POINTS TAKEN FROM ANALOG TRACE

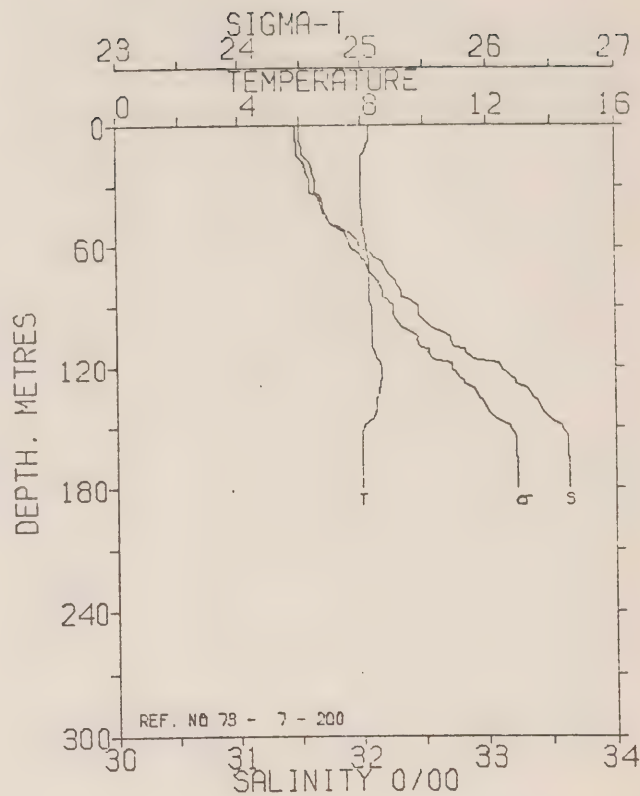
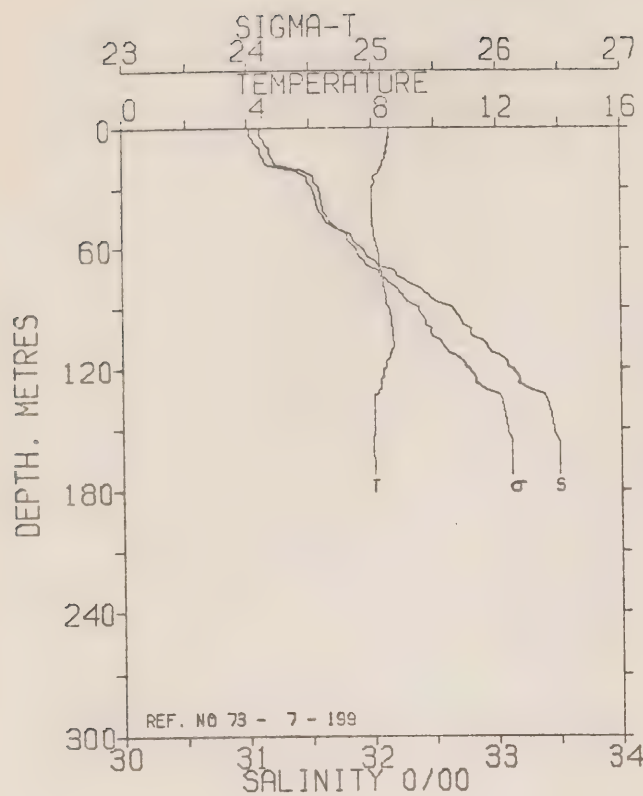
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.99	30.76	23.83	407.9	0.0	0.0	1481.
10	8.59	30.95	24.04	388.6	0.41	0.02	1480.
20	8.19	31.25	24.33	360.9	0.78	0.08	1479.
30	7.98	31.39	24.47	347.8	1.13	0.17	1479.
50	8.03	31.62	24.64	331.6	1.81	0.44	1479.
75	8.30	32.18	25.04	293.8	2.60	0.94	1482.
100	8.53	32.63	25.36	264.0	3.29	1.56	1483.
125	8.50	33.10	25.73	225.6	3.90	2.26	1484.
150	8.12	33.46	26.07	197.3	4.42	2.99	1484.
175	8.12	33.53	26.13	192.7	4.91	3.79	1484.

REFERENCE NO. 73- 7-196 STN- C DATE 22/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 17.0  
 RESULTS OF STD CAST 99 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.76	30.92	23.99	392.7	0.0	0.0	1481.
10	7.99	31.40	24.48	346.5	0.36	0.02	1478.
20	7.93	31.50	24.56	339.0	0.71	0.07	1478.
30	7.98	31.62	24.65	330.7	1.04	0.16	1479.
50	8.11	31.81	24.78	318.2	1.69	0.42	1480.
75	8.14	31.96	24.90	307.9	2.47	0.92	1481.
100	8.33	32.34	25.16	282.9	3.21	1.58	1482.
125	8.34	32.62	25.38	262.5	3.89	2.35	1483.
150	8.55	33.24	25.84	215.8	4.51	3.21	1485.
175	8.19	33.57	26.14	191.1	5.02	4.06	1485.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.99	30.76	22.83	90.	8.53	32.53	25.28	0.	8.76	30.92	23.99	90.	8.27	32.17	25.04
5.	8.97	30.76	23.84	95.	8.53	32.60	25.34	5.	8.28	31.26	24.33	95.	8.30	32.28	25.12
10.	8.59	30.95	24.04	100.	8.53	32.63	25.36	10.	7.99	31.40	24.48	100.	8.32	32.34	25.16
15.	8.24	31.19	24.28	105.	8.55	32.71	25.42	15.	7.91	31.45	24.53	105.	8.33	32.42	25.23
20.	8.19	31.25	24.33	110.	8.57	32.86	25.53	20.	7.93	31.50	24.56	110.	8.31	32.46	25.26
25.	8.10	31.33	24.41	115.	8.55	32.98	25.63	25.	7.96	31.53	24.59	115.	8.31	32.55	25.33
30.	7.98	31.39	24.47	120.	8.54	33.06	25.69	30.	7.98	31.62	24.65	120.	8.34	32.60	25.37
35.	8.03	31.47	24.53	125.	8.50	33.10	25.73	35.	8.03	31.68	24.69	125.	8.34	32.62	25.38
40.	7.99	31.51	24.56	130.	8.38	33.26	25.88	40.	8.03	31.68	24.69	130.	8.34	32.66	25.41
45.	8.01	31.54	24.58	135.	8.29	33.31	25.93	45.	8.07	31.80	24.78	135.	8.34	32.72	25.46
50.	8.03	31.62	24.64	140.	8.18	33.26	25.98	50.	8.11	31.81	24.78	140.	8.36	32.66	25.57
55.	8.08	31.70	24.70	145.	8.14	33.41	26.03	55.	8.13	31.85	24.81	145.	8.40	33.03	25.70
60.	8.09	31.79	24.76	150.	8.12	33.46	26.07	60.	8.14	31.89	24.84	150.	8.55	33.24	25.84
65.	8.12	31.81	24.78	155.	8.13	33.48	26.09	65.	8.15	31.93	24.87	155.	8.45	33.38	25.96
70.	8.22	32.04	24.94	160.	8.13	33.50	26.10	70.	8.15	31.93	24.87	160.	8.46	33.41	25.98
75.	8.30	32.18	25.04	165.	8.12	33.51	26.11	75.	8.14	31.96	24.90	165.	8.42	33.43	26.00
80.	8.41	32.34	25.15	170.	8.12	33.52	26.12	80.	8.19	32.07	24.98	170.	8.31	33.50	26.07
85.	8.51	32.51	25.27	175.	8.12	33.53	26.13	85.	8.24	32.10	24.99	175.	8.19	33.57	26.14





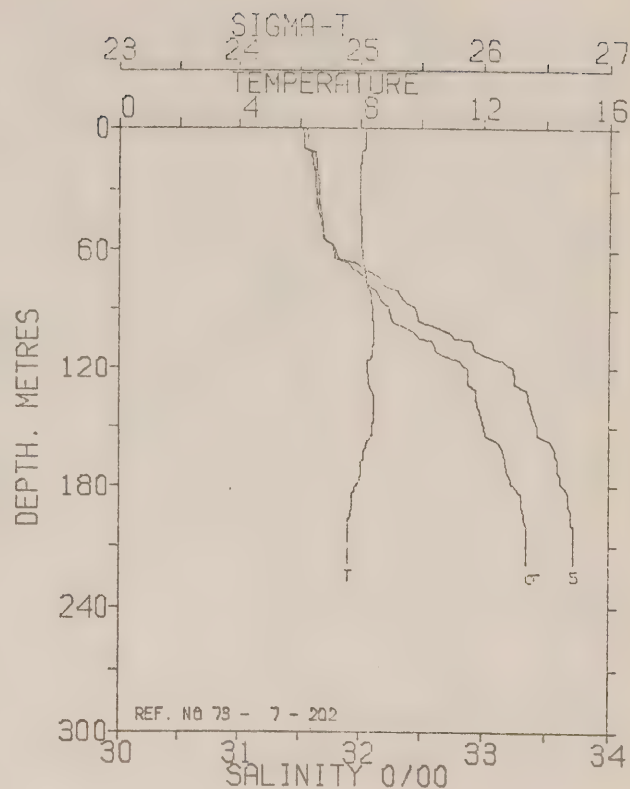
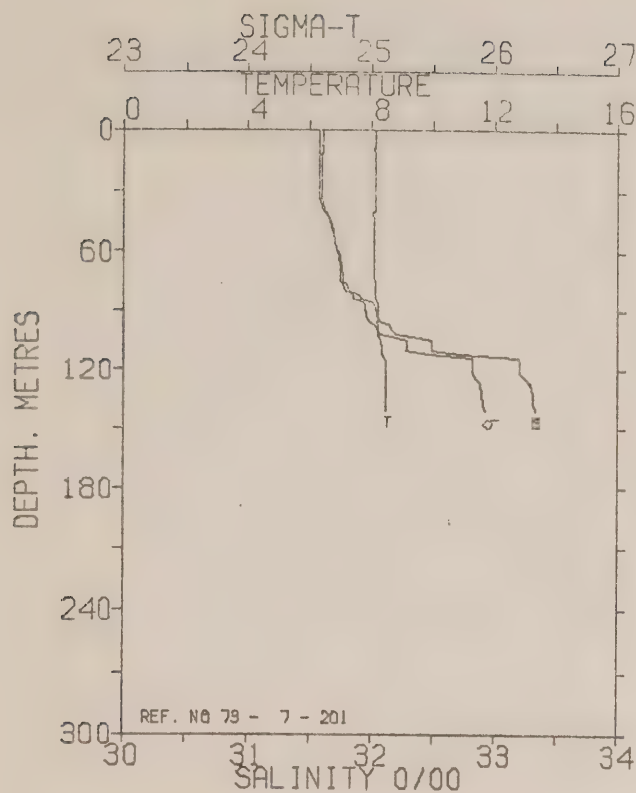
REFERENCE NO. 73- 7-199 STN- B DATE 22/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 20.0  
 RESULTS OF STD CAST 85 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.53	31.02	24.10	382.0	0.0	0.0	1480.
10	8.46	31.10	24.18	375.5	0.38	0.02	1480.
20	8.27	31.27	24.34	360.5	0.75	0.08	1479.
30	7.99	31.51	24.57	338.5	1.10	0.16	1479.
50	8.02	31.72	24.72	324.2	1.76	0.44	1480.
75	8.31	32.25	25.10	288.7	2.53	0.92	1482.
100	8.63	32.79	25.47	253.8	3.21	1.52	1484.
125	8.28	33.18	25.83	220.4	3.80	2.20	1484.
150	8.02	33.45	26.08	196.8	4.31	2.92	1483.

REFERENCE NO. 73- 7-200 STN- C DATE 22/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 21.0  
 RESULTS OF STD CAST 91 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.24	31.46	24.49	345.2	0.0	0.0	1475.
10	8.15	31.47	24.51	343.7	0.35	0.02	1479.
20	7.97	31.54	24.59	336.2	0.69	0.07	1479.
30	7.97	31.59	24.63	332.7	1.02	0.15	1479.
50	8.05	31.83	24.80	316.4	1.67	0.42	1480.
75	8.23	32.24	25.10	288.3	2.43	0.90	1481.
100	8.34	32.55	25.32	267.8	3.12	1.52	1483.
125	8.63	33.19	25.78	224.8	3.74	2.22	1485.
150	8.03	33.58	26.18	187.1	4.25	2.54	1484.
175	7.97	33.64	26.23	162.5	4.71	3.70	1484.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.53	31.02	24.10	85.	8.43	32.48	25.26	0.	8.24	31.46	24.49	90.	8.32	32.45	25.25
5.	8.52	31.04	24.12	90.	8.53	32.64	25.37	5.	8.24	31.46	24.49	95.	8.35	32.48	25.27
10.	8.46	31.10	24.18	95.	8.59	32.72	25.42	10.	8.15	31.47	24.51	100.	8.34	32.55	25.32
15.	8.40	31.12	24.20	100.	8.63	32.79	25.47	15.	7.99	31.47	24.53	105.	8.34	32.71	25.45
20.	8.27	31.27	24.34	105.	8.65	32.84	25.51	20.	7.97	31.54	24.59	110.	8.36	32.74	25.48
25.	8.06	31.48	24.53	110.	8.58	32.94	25.59	25.	7.97	31.56	24.61	115.	8.47	32.88	25.56
30.	7.99	31.51	24.57	115.	8.45	33.07	25.72	30.	7.97	31.59	24.63	120.	8.63	33.11	25.72
35.	7.98	31.54	24.59	120.	8.34	33.13	25.78	35.	7.99	31.64	24.67	125.	8.63	33.19	25.78
40.	7.98	31.55	24.60	125.	8.28	33.18	25.83	40.	8.01	31.67	24.69	130.	8.52	33.21	25.89
45.	7.99	31.61	24.64	130.	8.19	33.26	25.90	45.	8.03	31.72	24.72	135.	8.49	33.27	25.94
50.	8.02	31.72	24.72	135.	8.06	33.40	26.03	50.	8.05	31.83	24.80	140.	8.44	33.42	25.99
55.	8.08	31.83	24.80	140.	8.04	33.43	26.06	55.	8.12	31.84	24.88	145.	8.31	33.49	26.07
60.	8.16	31.93	24.86	145.	8.04	33.44	26.07	60.	8.17	31.99	24.91	150.	8.03	33.58	26.18
65.	8.19	32.01	24.93	150.	8.03	33.45	26.08	65.	8.22	32.10	25.00	155.	7.96	33.63	26.23
70.	8.22	32.11	25.00	155.	8.00	33.49	26.11	70.	8.23	32.18	25.05	160.	7.98	33.63	26.23
75.	8.31	32.25	25.10	160.	8.01	33.50	26.12	75.	8.23	32.24	25.10	165.	7.98	33.64	26.23
80.	8.37	32.39	25.20	165.	8.01	33.50	26.12	80.	8.24	32.30	25.15	170.	7.97	33.64	26.24
								85.	8.24	32.32	25.16	175.	7.97	33.64	26.23



REFERENCE NO. 73- 7-201 STN- D DATE 22/ 3/73  
 POSITION 48-22.5N, 124- 7.8W PST 22.0  
 RESULTS OF STD CAST 47 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.10	31.57	24.60	335.0	0.0	0.0	1479.
10	8.09	31.57	24.60	335.5	0.34	0.02	1479.
20	8.11	31.57	24.59	335.9	0.67	0.07	1479.
30	8.12	31.57	24.59	336.3	1.01	0.15	1479.
50	8.07	31.68	24.69	327.5	1.67	0.43	1480.
75	8.10	31.76	24.75	322.2	2.48	0.54	1480.
100	8.18	32.17	25.05	293.3	3.25	1.62	1482.
125	8.49	33.25	25.85	218.0	3.87	2.33	1485.

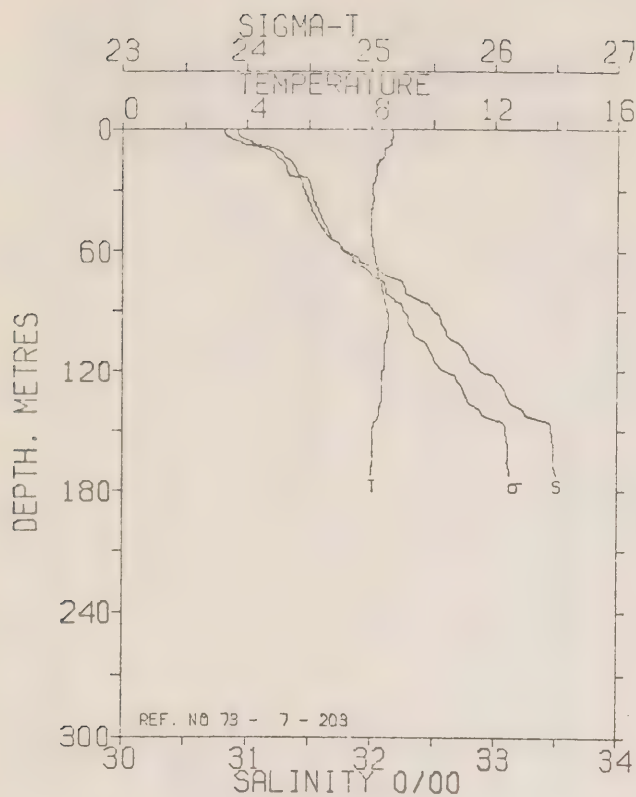
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.10	31.57	24.60	75.	8.10	31.76	24.75
5.	8.10	31.57	24.60	80.	8.12	31.81	24.78
10.	8.09	31.57	24.60	85.	8.17	32.00	24.92
15.	8.10	31.57	24.59	90.	8.18	32.04	24.95
20.	8.11	31.57	24.59	95.	8.17	32.07	24.98
25.	8.12	31.53	24.56	100.	8.18	32.17	25.05
30.	8.14	31.56	24.58	105.	8.29	32.49	25.29
35.	8.30	31.50	24.51	110.	8.29	32.49	25.28
40.	8.06	31.61	24.63	115.	8.44	33.19	25.81
45.	8.07	31.66	24.67	120.	8.49	33.20	25.82
50.	8.07	31.68	24.65	125.	8.49	33.25	25.85
55.	8.03	31.63	24.65	130.	8.49	33.30	25.89
60.	8.08	31.73	24.72	135.	8.49	33.31	25.90
65.	8.08	31.75	24.74	140.	8.48	33.33	25.91

REFERENCE NO. 73- 7-202 STN- A DATE 22/ 3/73  
 POSITION 48-22.7N, 124-21.0W PST 23.0  
 RESULTS OF STD CAST 100 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.16	31.52	24.55	335.6	0.0	0.0	1479.
10	8.15	31.53	24.56	339.2	0.34	0.02	1479.
20	8.01	31.61	24.64	331.4	0.67	0.07	1479.
30	8.01	31.63	24.66	330.0	1.00	0.15	1479.
50	8.03	31.68	24.69	326.8	1.66	0.42	1480.
75	8.21	32.18	25.05	292.9	2.44	0.52	1481.
100	8.48	32.67	25.40	260.5	3.14	1.54	1483.
125	8.30	33.26	25.89	214.7	3.73	2.21	1484.
150	8.41	33.43	26.01	203.9	4.25	2.54	1485.
175	7.99	33.62	26.21	184.6	4.73	3.73	1484.
200	7.63	33.72	26.35	172.2	5.17	4.58	1483.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.16	31.52	24.55	110.	8.42	32.53	25.62
5.	8.15	31.53	24.56	115.	8.33	33.10	25.76
10.	8.15	31.53	24.56	120.	8.27	33.24	25.88
15.	8.02	31.60	24.63	125.	8.30	33.26	25.89
20.	8.01	31.61	24.64	130.	8.34	33.30	25.91
25.	8.01	31.62	24.65	135.	8.45	33.37	25.95
30.	8.01	31.63	24.66	140.	8.45	33.39	25.97
35.	8.01	31.64	24.66	145.	8.43	33.41	25.99
40.	8.01	31.65	24.67	150.	8.41	33.43	26.01
45.	8.03	31.67	24.68	155.	8.33	33.47	26.05
50.	8.03	31.68	24.69	160.	8.17	33.56	26.14
55.	8.03	31.72	24.72	165.	8.10	33.59	26.17
60.	8.06	31.79	24.77	170.	8.06	33.60	26.19
65.	8.08	31.89	24.85	175.	7.99	33.62	26.21
70.	8.15	22.02	24.94	180.	7.86	33.64	26.25
75.	8.21	32.18	25.05	185.	7.75	33.69	26.31
80.	8.33	32.31	25.14	190.	7.75	33.69	26.31
85.	8.39	32.36	25.17	195.	7.66	33.70	26.33
90.	8.41	32.45	25.24	200.	7.63	33.72	26.35
95.	8.44	32.48	25.26	205.	7.61	33.72	26.35
100.	8.48	32.67	25.40	210.	7.61	33.73	26.35
105.	8.46	32.78	25.49	215.	7.60	33.73	26.36

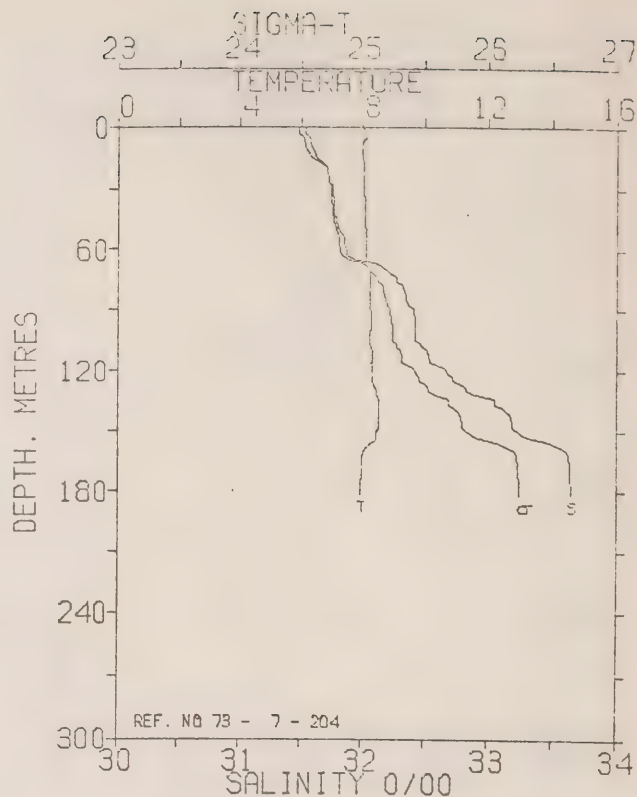




REFERENCE NO. 73- 7-203 STN- B DATE 23/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 0.1  
 RESULTS OF STD CAST 94 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.66	30.81	22.92	395.5	0.0	0.0	1480.
10	8.41	31.16	24.23	370.2	0.39	0.02	1480.
20	8.15	31.32	24.39	355.0	0.75	0.07	1479.
30	8.06	31.46	24.51	343.6	1.10	0.16	1479.
50	7.99	31.62	24.65	331.3	1.78	0.44	1479.
75	8.29	32.25	25.10	288.4	2.56	0.94	1482.
100	8.52	32.60	25.34	266.3	3.25	1.55	1483.
125	8.33	33.01	25.69	233.7	3.88	2.27	1484.
150	8.04	33.46	26.08	196.3	4.42	3.03	1484.

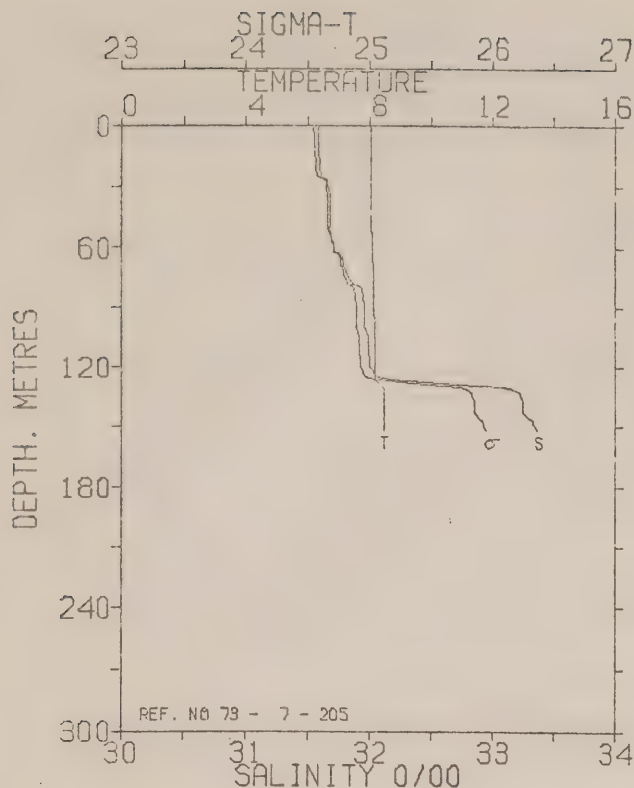
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.66	30.81	23.92	90.	8.51	32.49	25.26
5.	8.59	30.87	23.98	95.	8.55	32.56	25.30
10.	8.41	31.16	24.23	100.	8.52	32.60	25.34
15.	8.26	31.27	24.34	105.	8.44	32.67	25.41
20.	8.15	31.32	24.39	110.	8.43	32.76	25.48
25.	8.09	31.43	24.49	115.	8.44	32.80	25.51
30.	8.06	31.46	24.51	120.	8.34	32.89	25.59
35.	8.08	31.49	24.53	125.	8.33	33.01	25.69
40.	7.99	31.52	24.57	130.	8.32	33.08	25.74
45.	7.98	31.56	24.60	135.	8.31	33.12	25.77
50.	7.99	31.62	24.65	140.	8.23	33.24	25.88
55.	8.04	31.70	24.70	145.	8.07	33.44	26.07
60.	8.08	31.80	24.77	150.	8.04	33.46	26.08
65.	8.11	31.90	24.85	155.	8.03	33.48	26.10
70.	8.18	32.06	24.97	160.	8.02	33.48	26.10
75.	8.29	32.25	25.10	165.	8.02	33.48	26.10
80.	8.36	32.28	25.11	170.	8.00	33.49	26.11



REFERENCE NO. 73- 7-204 STN- C DATE 23/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 1.1  
 RESULTS OF STD CAST 86 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.06	31.47	24.52	341.9	0.0	0.0	1479.
10	8.01	31.53	24.58	337.3	0.34	0.02	1479.
20	8.05	31.71	24.71	324.6	0.67	0.07	1479.
30	8.06	31.75	24.74	321.7	0.95	0.15	1479.
50	8.10	31.81	24.78	318.5	1.64	0.41	1480.
75	8.27	32.28	25.13	285.9	2.40	0.90	1482.
100	8.28	32.43	25.24	275.8	3.10	1.52	1482.
125	8.35	32.72	25.46	255.5	3.77	2.29	1483.
150	8.49	33.23	25.84	220.0	4.35	3.10	1485.
175	7.95	33.64	26.24	182.1	4.83	3.69	1484.

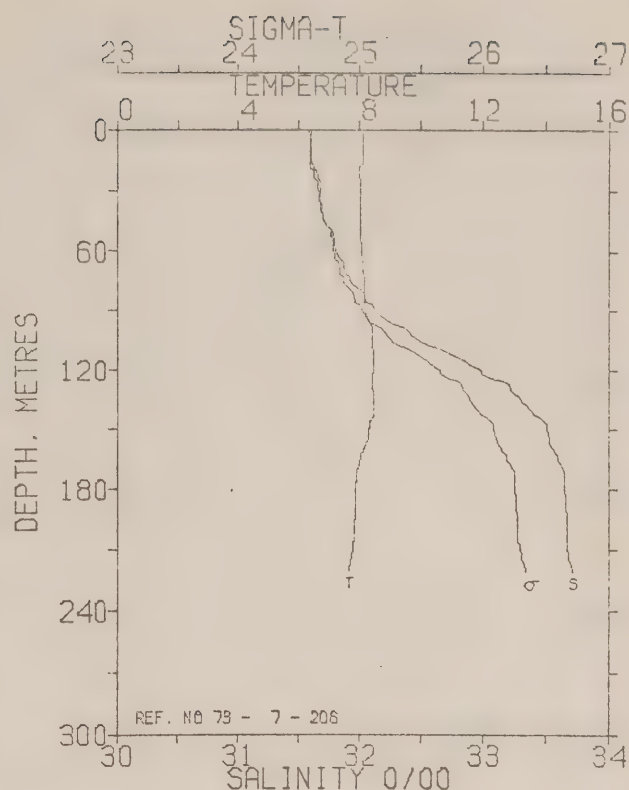
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.06	31.47	24.52	95.	8.28	32.42	25.23
5.	8.10	31.52	24.56	100.	8.28	32.43	25.24
10.	8.01	31.53	24.58	105.	8.28	32.43	25.24
15.	7.99	31.60	24.63	110.	8.31	32.52	25.31
20.	8.05	31.71	24.71	115.	8.30	32.54	25.32
25.	8.05	31.72	24.72	120.	8.32	32.67	25.42
30.	8.06	31.75	24.74	125.	8.35	32.67	25.46
35.	8.08	31.74	24.73	130.	8.45	32.83	25.53
40.	8.08	31.77	24.75	135.	8.56	33.06	25.69
45.	8.08	31.78	24.76	140.	8.54	33.16	25.77
50.	8.10	31.81	24.78	145.	8.53	33.18	25.79
55.	8.12	31.85	24.81	150.	8.49	33.23	25.84
60.	8.12	31.86	24.82	155.	8.33	33.46	26.04
65.	8.13	31.95	24.89	160.	8.02	33.62	26.21
70.	8.25	32.19	25.05	165.	7.98	33.64	26.23
75.	8.27	32.28	25.13	170.	7.95	33.64	26.24
80.	8.26	32.34	25.17	175.	7.96	33.65	26.24
85.	8.26	32.35	25.18	180.	7.96	33.65	26.24



REFERENCE NO. 73- 7-205 STN- D DATE 23/ 3/73  
POSITION 48-22.5N, 124- 7.8W PST 2.1  
RESULTS OF STD CAST 54 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVa	DELTA D	PCT EN	SOUND VEL
0	8.02	31.54	24.59	336.2	0.0	0.0	1478.
10	8.03	31.55	24.59	336.2	0.34	0.02	1479.
20	8.04	31.56	24.59	335.8	0.67	0.07	1479.
30	8.05	31.65	24.66	329.5	1.01	0.15	1479.
50	8.06	31.66	24.67	325.2	1.66	0.42	1480.
75	8.10	31.83	24.79	317.5	2.47	0.94	1480.
100	8.16	31.96	24.89	308.7	3.25	1.63	1481.
125	8.17	32.06	24.97	302.0	4.01	2.51	1482.
150	8.47	33.34	25.93	211.2	4.59	3.31	1485.

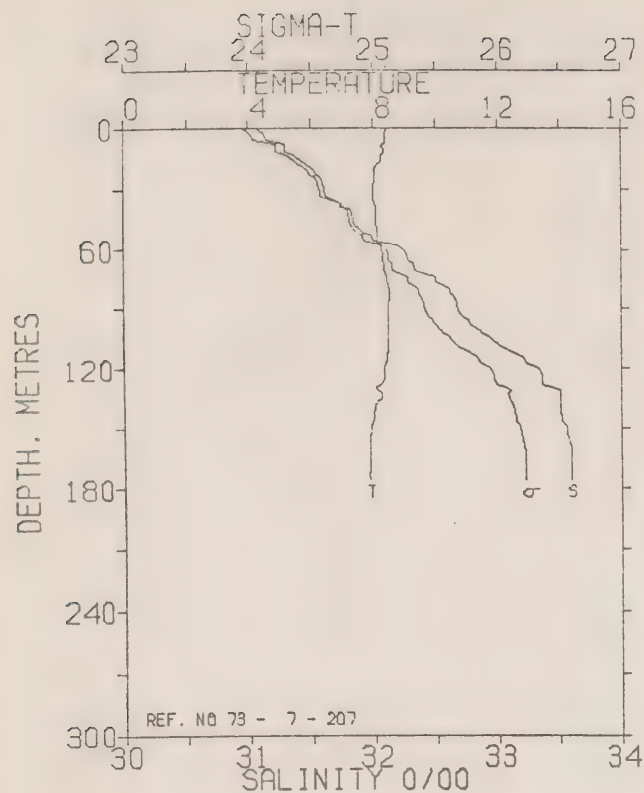
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.02	31.54	24.59	80.	8.14	31.93	24.87
5.	8.02	31.55	24.59	85.	8.15	31.94	24.88
10.	8.03	31.55	24.59	90.	8.15	31.96	24.89
15.	8.04	31.55	24.59	95.	8.15	31.96	24.89
20.	8.04	31.56	24.59	100.	8.16	31.96	24.89
25.	8.04	31.57	24.61	105.	8.17	31.99	24.91
30.	8.05	31.65	24.66	110.	8.17	31.99	24.91
35.	8.05	31.66	24.67	115.	8.17	31.92	24.86
40.	8.05	31.66	24.67	120.	8.17	32.03	24.94
45.	8.04	31.60	24.62	125.	8.17	32.06	24.97
50.	8.07	31.69	24.69	130.	8.43	33.09	25.73
55.	8.07	31.68	24.68	135.	8.48	33.23	25.84
60.	8.08	31.71	24.70	140.	8.48	33.25	25.85
65.	8.08	31.77	24.76	145.	8.49	33.28	25.88
70.	8.09	31.79	24.77	150.	8.47	33.34	25.93



REFERENCE NO. 73- 7-206 STN- A DATE 23/ 3/73  
POSITION 48-22.7N, 124-21.0W PST 3.1  
RESULTS OF STD CAST 105 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVa	DELTA D	PCT EN	SOUND VEL
0	8.14	31.58	24.60	334.8	0.0	0.0	1479.
10	8.13	31.59	24.61	334.5	0.33	0.02	1479.
20	8.01	31.62	24.65	330.8	0.67	0.07	1479.
30	8.03	31.66	24.68	328.0	1.00	0.15	1479.
50	8.06	31.78	24.76	320.3	1.65	0.42	1480.
75	8.15	31.93	24.87	310.5	2.44	0.94	1481.
100	8.40	32.39	25.19	280.2	3.18	1.58	1483.
125	8.42	33.13	25.77	226.3	3.82	2.21	1484.
150	8.30	33.51	26.09	196.2	4.35	3.05	1485.
175	7.89	33.65	26.25	180.5	4.82	3.82	1484.
200	7.81	33.67	26.28	178.5	5.27	4.68	1484.

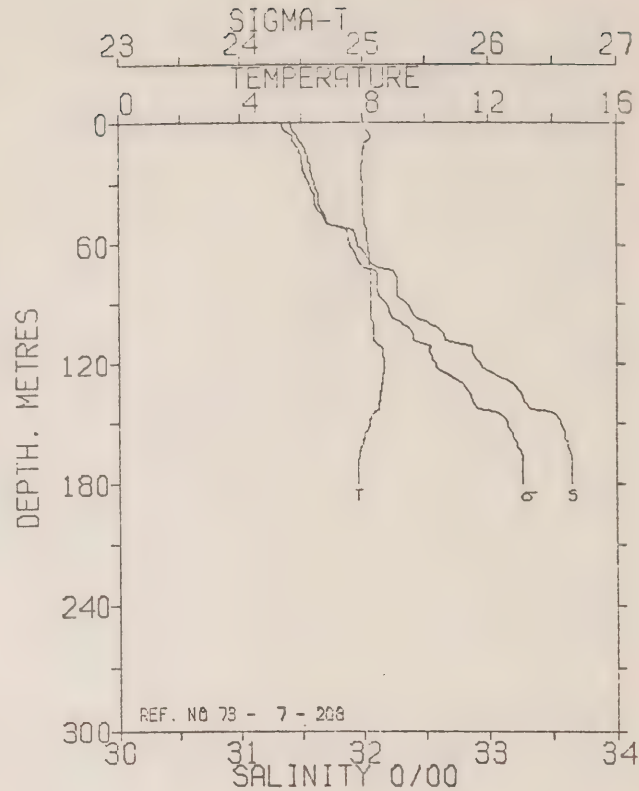
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.14	31.58	24.60	115.	8.48	32.66	25.55
5.	8.14	31.59	24.61	120.	8.45	32.99	25.65
10.	8.13	31.59	24.61	125.	8.42	33.13	25.77
15.	8.12	31.59	24.61	130.	8.43	33.23	25.84
20.	8.01	31.62	24.65	135.	8.48	33.21	25.90
25.	8.02	31.65	24.67	140.	8.49	33.28	25.95
30.	8.03	31.66	24.68	145.	8.36	33.47	26.04
35.	8.03	31.67	24.68	150.	8.30	33.51	26.09
40.	8.04	31.68	24.69	155.	8.26	33.53	26.11
45.	8.04	31.70	24.71	160.	8.13	33.56	26.15
50.	8.06	31.78	24.76	165.	8.03	33.59	26.19
55.	8.07	31.80	24.78	170.	7.90	33.64	26.25
60.	8.07	31.81	24.78	175.	7.89	33.65	26.25
65.	8.10	31.86	24.82	180.	7.87	33.65	26.26
70.	8.12	31.88	24.84	185.	7.88	33.66	26.26
75.	8.15	31.93	24.87	190.	7.81	33.67	26.28
80.	8.16	32.01	24.93	195.	7.81	33.67	26.28
85.	8.16	32.05	24.96	200.	7.84	33.67	26.28
90.	8.19	32.13	25.02	205.	7.81	33.66	26.27
95.	8.31	32.23	25.08	210.	7.75	33.68	26.30
100.	8.40	32.39	25.19	215.	7.70	33.69	26.31
105.	8.41	32.49	25.27	220.	7.64	33.71	26.34



REFERENCE NO. 73- 7-207 STN- B DATE 23/ 3/73  
 POSITION 48-17.0N, 124-11.8W PST 4.0  
 RESULTS OF STD CAST 102 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.39	30.95	24.07	385.3	0.0	0.0	1479.
10	8.30	31.22	24.29	364.4	0.38	0.02	1479.
20	8.03	31.46	24.52	343.1	0.73	0.07	1479.
30	8.01	31.56	24.60	335.3	1.07	0.16	1479.
50	8.12	31.89	24.84	312.9	1.71	0.42	1480.
75	8.41	32.50	25.28	271.9	2.44	0.88	1482.
100	8.47	32.83	25.52	248.8	3.09	1.46	1484.
125	8.32	33.37	25.97	206.9	3.66	2.11	1484.
150	7.90	33.56	26.18	187.1	4.14	2.79	1483.
175	7.86	33.60	26.22	183.7	4.60	3.55	1483.

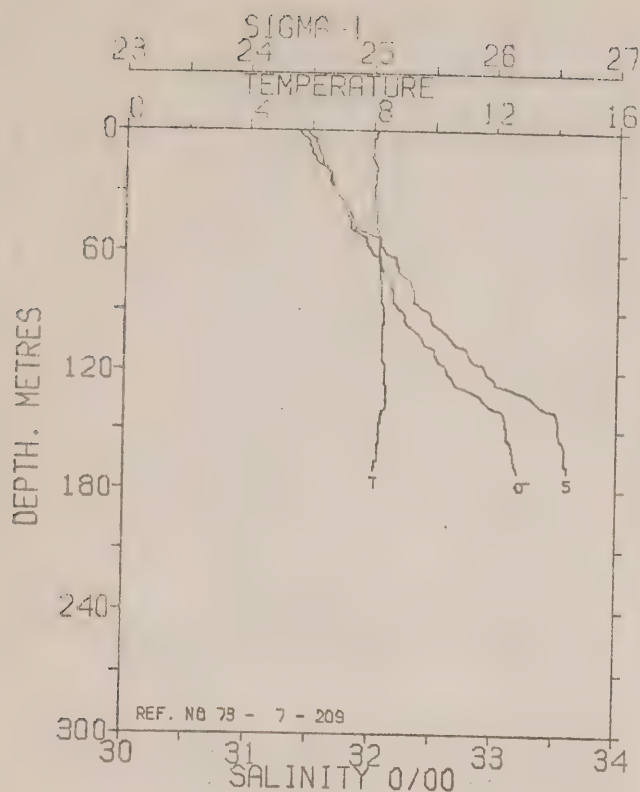
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.39	30.95	24.07	90.	8.45	32.68	25.41
5.	8.38	31.04	24.14	95.	8.45	32.76	25.48
10.	8.30	31.22	24.29	100.	8.47	32.83	25.52
15.	8.21	31.34	24.40	105.	8.46	32.95	25.62
20.	8.03	31.46	24.52	110.	8.44	33.06	25.71
25.	8.03	31.54	24.58	115.	8.39	33.21	25.84
30.	8.01	31.56	24.60	120.	8.33	33.33	25.94
35.	8.00	31.65	24.67	125.	8.32	33.37	25.97
40.	8.08	31.81	24.78	130.	8.07	33.47	26.08
45.	8.09	31.83	24.80	135.	8.20	33.51	26.10
50.	8.12	31.89	24.84	140.	8.02	33.52	26.13
55.	8.14	31.99	24.92	145.	7.98	33.52	26.14
60.	8.25	32.25	25.10	150.	7.90	33.56	26.18
65.	8.29	32.27	25.12	155.	7.86	33.58	26.21
70.	8.35	32.32	25.15	160.	7.85	33.59	26.21
75.	8.41	32.50	25.28	165.	7.85	33.60	26.22
80.	8.51	32.62	25.36	170.	7.84	33.60	26.22
85.	8.49	32.65	25.38	175.	7.86	33.60	26.22



REFERENCE NO. 73- 7-208 STN- C DATE 23/ 3/73  
 POSITION 48-19.5N, 124-10.0W PST 5.0  
 RESULTS OF STD CAST 87 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.10	31.33	24.41	352.9	0.0	0.0	1479.
10	8.05	31.43	24.49	345.3	0.35	0.02	1479.
20	7.95	31.50	24.56	335.1	0.69	0.07	1479.
30	7.96	31.56	24.61	334.8	1.03	0.16	1479.
50	8.05	31.71	24.71	325.4	1.69	0.43	1480.
75	8.25	32.26	25.11	287.5	2.45	0.91	1482.
100	8.31	32.53	25.31	268.9	3.16	1.54	1483.
125	8.63	33.05	25.67	235.2	3.79	2.26	1485.
150	8.19	33.57	26.15	190.5	4.32	3.00	1484.
175	7.82	33.65	26.26	179.5	4.78	3.76	1483.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.10	31.33	24.41	90.	8.25	32.36	25.19
5.	8.21	31.39	24.44	95.	8.27	32.40	25.22
10.	8.05	31.43	24.49	100.	8.31	32.53	25.31
15.	8.00	31.47	24.53	105.	8.25	32.65	25.40
20.	7.95	31.50	24.56	110.	8.47	32.60	25.50
25.	7.94	31.52	24.58	115.	8.64	32.88	25.54
30.	7.96	31.56	24.61	120.	8.68	32.94	25.58
35.	7.98	31.60	24.63	125.	8.63	33.05	25.67
40.	7.98	31.61	24.64	130.	8.58	33.20	25.80
45.	8.00	31.67	24.68	135.	8.53	33.26	25.85
50.	8.05	31.71	24.71	140.	8.51	33.29	25.88
55.	8.14	31.93	24.87	145.	8.29	33.52	26.10
60.	8.15	31.95	24.89	150.	8.19	33.57	26.15
65.	8.18	32.02	24.94	155.	8.06	33.59	26.18
70.	8.22	32.07	24.97	160.	7.96	33.62	26.22
75.	8.25	32.26	25.11	165.	7.85	33.64	26.26
80.	8.25	32.27	25.12	170.	7.82	33.65	26.26
85.	8.24	32.27	25.12	175.	7.82	33.65	26.26



REFERENCE NO. 79-7-209 STN-  
 POSITION 0-0.0N, 0-0.0W PST 5.5  
 RESULTS OF STD CAST 93 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT. EN	SOUND VEL
0	8.12	31.39	24.45	348.7	0.0	0.0	1479.
10	7.99	31.49	24.55	340.0	0.34	0.02	1478.
20	8.09	31.63	24.64	331.2	0.68	0.07	1479.
30	8.06	31.69	24.70	326.2	1.01	0.15	1479.
50	8.15	31.92	24.86	310.8	1.65	0.41	1480.
75	8.29	32.31	25.14	284.4	2.39	0.88	1482.
100	8.33	32.58	25.35	265.0	3.08	1.50	1483.
125	8.42	33.01	25.67	235.0	3.70	2.22	1484.
150	8.26	33.53	26.10	194.5	4.23	2.55	1484.

DEPTH	TEMP	SAL	SIGMA T
0.	8.12	31.39	24.45
5.	8.00	31.47	24.53
10.	7.99	31.49	24.55
15.	7.99	31.53	24.58
20.	8.09	31.63	24.64
25.	8.08	31.65	24.66
30.	8.06	31.69	24.70
35.	8.07	31.77	24.76
40.	8.10	31.81	24.78
45.	8.13	31.85	24.81
50.	8.15	31.92	24.86
55.	8.23	32.05	24.95
60.	8.22	32.10	24.99
65.	8.24	32.19	25.06
70.	8.24	32.21	25.08
75.	8.29	32.31	25.14
80.	8.31	32.34	25.17

DEPTH	TEMP	SAL	SIGMA T
90.	8.37	32.45	25.25
95.	8.36	32.49	25.27
100.	8.33	32.58	25.35
105.	8.33	32.66	25.41
110.	8.35	32.78	25.54
115.	8.36	32.82	25.54
120.	8.40	32.93	25.61
125.	8.42	33.01	25.67
130.	8.49	33.17	25.79
135.	8.47	33.33	25.91
140.	8.31	33.49	26.06
145.	8.28	33.52	26.09
150.	8.26	33.53	26.10
155.	8.23	33.55	26.13
160.	8.19	33.57	26.15
165.	8.17	33.58	26.16
170.	8.08	33.60	26.19

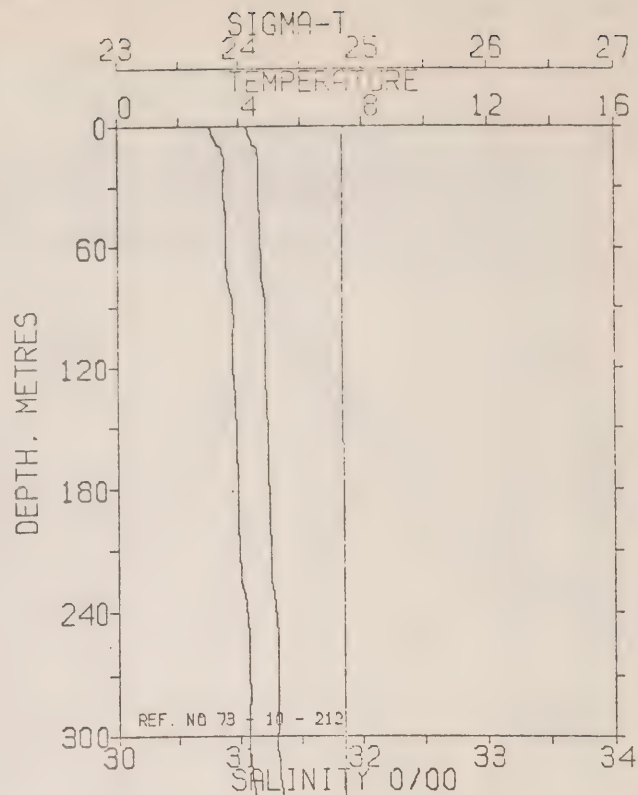
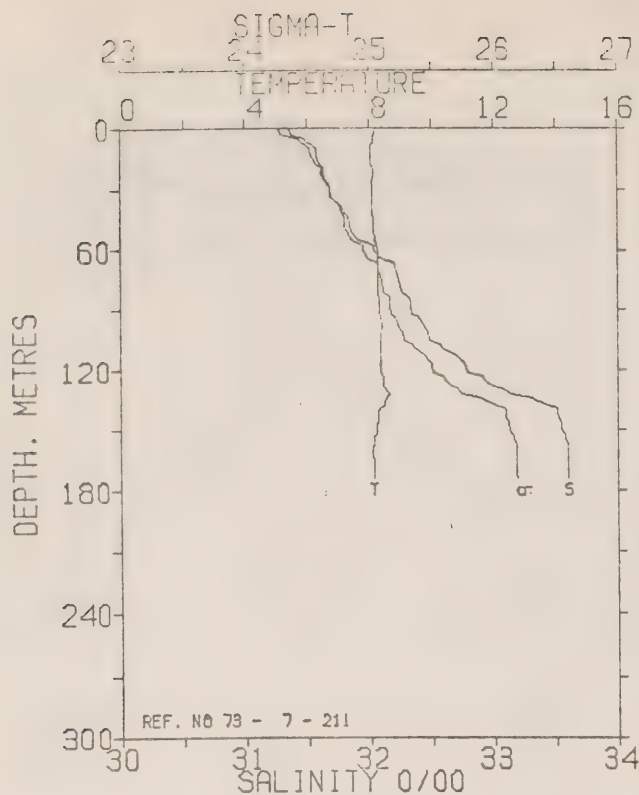
REFERENCE NO. 79-7-210 STN-  
 POSITION 0-0.0N, 0-0.0W PST 6.2  
 RESULTS OF STD CAST 80 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT. EN	SOUND VEL
0	8.12	31.40	24.46	348.0	0.0	0.0	1479.
10	8.06	31.51	24.55	339.5	0.34	0.02	1479.
20	8.10	31.60	24.62	333.5	0.68	0.07	1479.
30	8.07	31.67	24.68	327.8	1.01	0.15	1479.
50	8.14	31.86	24.81	315.4	1.65	0.42	1480.
75	8.23	32.24	25.10	288.3	2.40	0.89	1481.
100	8.34	32.49	25.28	271.8	3.10	1.52	1483.
125	8.42	32.94	25.62	239.7	3.74	2.25	1484.
150	8.17	33.57	26.15	190.2	4.26	2.59	1484.

DEPTH	TEMP	SAL	SIGMA T
0.	8.12	31.40	24.46
5.	8.10	31.48	24.51
10.	8.06	31.51	24.55
15.	8.04	31.53	24.57
20.	8.10	31.60	24.62
25.	8.08	31.65	24.66
30.	8.07	31.67	24.68
35.	8.07	31.75	24.74
40.	8.09	31.80	24.77
45.	8.12	31.83	24.79
50.	8.14	31.86	24.81
55.	8.21	32.01	24.92
60.	8.23	32.06	24.96
65.	8.23	32.19	25.06
70.	8.23	32.21	25.07
75.	8.23	32.24	25.10
80.	8.30	32.32	25.16

DEPTH	TEMP	SAL	SIGMA T
90.	8.37	32.41	25.21
95.	8.35	32.47	25.26
100.	8.34	32.49	25.28
105.	8.34	32.53	25.31
110.	8.33	32.65	25.40
115.	8.34	32.77	25.50
120.	8.36	32.80	25.52
125.	8.42	32.94	25.62
130.	8.52	32.99	25.72
135.	8.45	33.31	25.90
140.	8.30	33.49	26.07
145.	8.19	33.55	26.13
150.	8.17	33.57	26.15
155.	8.16	33.58	26.16
160.	8.13	33.58	26.17
165.	8.11	33.59	26.18
170.	8.08	33.60	26.19





REFERENCE NO. 73-7-211 STN- DATE 23/ 3/73  
 POSITION 0-0.0N, 0-0.0W PST 6.4  
 RESULTS OF STD CAST 89 POINTS TAKEN FROM ANALOG TRACE

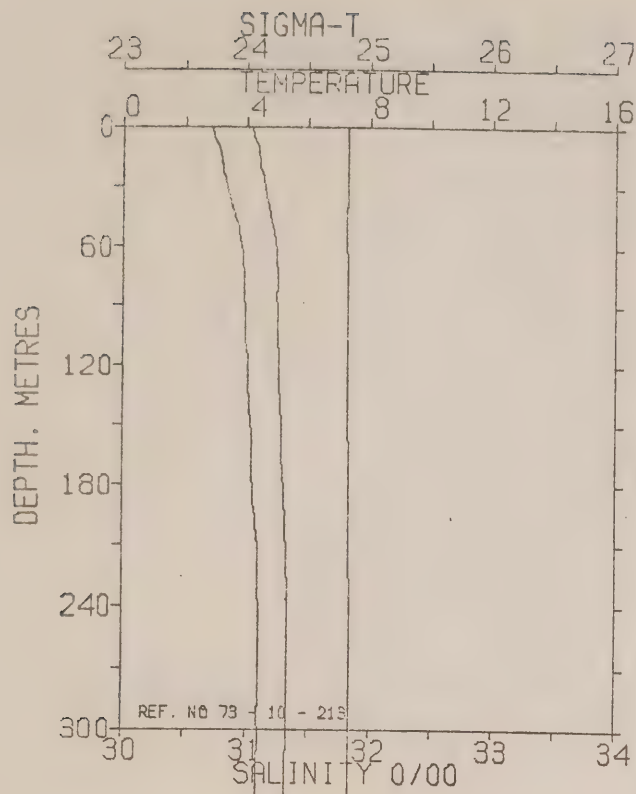
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.15	31.27	24.36	358.1	0.0	0.0	1479.
10	8.04	31.52	24.57	338.5	0.35	0.02	1479.
20	8.10	31.61	24.63	332.8	0.69	0.07	1479.
30	8.08	31.67	24.68	328.0	1.02	0.15	1479.
50	8.12	31.85	24.81	316.0	1.66	0.42	1480.
75	8.25	32.23	25.09	289.3	2.41	0.89	1482.
100	8.37	32.45	25.24	275.3	3.12	1.53	1483.
125	8.42	32.92	25.60	241.7	3.77	2.27	1484.
150	8.21	33.55	26.13	192.3	4.29	3.00	1484.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.15	31.27	24.36	90.	8.30	32.34	25.17
5.	8.13	31.42	24.41	95.	8.35	32.40	25.21
10.	8.04	31.52	24.57	100.	8.37	32.45	25.24
15.	8.04	31.54	24.58	105.	8.35	32.48	25.27
20.	8.10	31.61	24.63	110.	8.32	32.62	25.39
25.	8.09	31.63	24.64	115.	8.35	32.75	25.48
30.	8.08	31.67	24.68	120.	8.35	32.78	25.51
35.	8.07	31.71	24.71	125.	8.42	32.92	25.60
40.	8.08	31.78	24.76	130.	8.51	33.08	25.72
45.	8.11	31.83	24.80	135.	8.46	33.24	25.92
50.	8.12	31.85	24.81	140.	8.27	33.52	26.09
55.	8.15	31.92	24.86	145.	8.23	33.53	26.11
60.	8.23	32.04	24.94	150.	8.21	33.55	26.13
65.	8.23	32.13	25.02	155.	8.13	33.58	26.16
70.	8.24	32.20	25.07	160.	8.09	33.59	26.18
75.	8.25	32.23	25.09	165.	8.05	33.59	26.18
80.	8.26	32.25	25.10	170.	8.11	33.58	26.17

REFERENCE NO. 73-10-212 STN- J09 DATE 9/ 4/73  
 POSITION 50-34.0N, 126-48.0W PST 22.5  
 RESULTS OF STD CAST 94 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.38	30.76	24.06	386.0	0.0	0.0	1475.
10	7.35	30.84	24.13	380.1	0.38	0.02	1475.
20	7.34	30.87	24.15	377.9	0.76	0.08	1475.
30	7.34	30.87	24.15	378.1	1.14	0.17	1475.
50	7.33	30.89	24.17	377.0	1.90	0.48	1476.
75	7.33	30.90	24.18	376.0	2.84	1.08	1476.
100	7.37	30.95	24.21	373.2	3.77	1.52	1477.
125	7.37	30.95	24.21	373.3	4.71	2.99	1477.
150	7.37	30.97	24.23	372.3	5.64	4.29	1478.
175	7.38	30.98	24.24	371.7	6.57	5.83	1478.
200	7.39	30.99	24.24	371.7	7.50	7.61	1479.
225	7.39	31.01	24.25	370.6	8.43	9.62	1479.
250	7.39	31.07	24.30	366.5	9.35	11.84	1480.
300	7.41	31.06	24.30	367.6	11.18	16.99	1480.
400	7.42	31.17	24.38	360.8	14.82	29.58	1482.

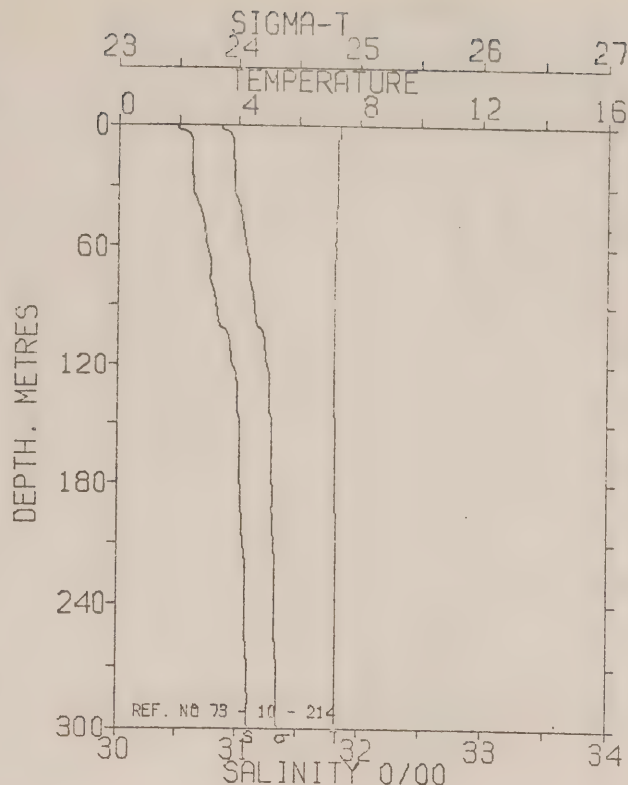
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.38	30.76	24.06	180.	7.39	30.96	24.22
5.	7.36	30.78	24.08	185.	7.39	31.00	24.25
10.	7.35	30.84	24.13	190.	7.39	30.97	24.23
15.	7.34	30.87	24.15	195.	7.39	31.01	24.25
20.	7.34	30.87	24.15	200.	7.39	30.97	24.22
25.	7.34	30.87	24.15	205.	7.39	30.90	24.17
30.	7.34	30.86	24.15	210.	7.39	30.93	24.19
35.	7.34	30.87	24.15	215.	7.39	31.03	24.27
40.	7.37	30.89	24.16	220.	7.39	31.03	24.27
45.	7.33	30.89	24.17	225.	7.39	31.07	24.31
50.	7.33	30.89	24.17	230.	7.39	31.07	24.30
55.	7.33	30.89	24.17	235.	7.39	31.07	24.30
60.	7.33	30.88	24.16	240.	7.39	31.01	24.25
65.	7.33	30.89	24.17	245.	7.35	31.13	24.35
70.	7.33	30.90	24.17	250.	7.40	31.07	24.30
75.	7.33	30.90	24.18	255.	7.40	31.07	24.30
80.	7.33	30.92	24.19	260.	7.40	31.07	24.30
85.	7.35	30.94	24.20	265.	7.40	30.93	24.19
90.	7.36	30.94	24.21	270.	7.40	31.04	24.27
95.	7.36	30.95	24.21	275.	7.40	30.99	24.23
100.	7.37	30.95	24.21	280.	7.41	31.12	24.34
105.	7.37	30.95	24.21	285.	7.41	31.06	24.29
110.	7.36	30.95	24.21	290.	7.41	31.08	24.31
115.	7.35	30.95	24.21	295.	7.41	31.14	24.35
120.	7.37	30.95	24.21	300.	7.41	31.07	24.30
125.	7.37	30.95	24.21	305.	7.52	30.92	24.17
130.	7.37	30.96	24.22	310.	7.52	31.01	24.26
135.	7.37	30.97	24.22	315.	7.41	31.09	24.32
140.	7.37	30.96	24.22	320.	7.41	31.11	24.33
145.	7.37	30.97	24.23	325.	7.41	31.20	24.40
150.	7.37	30.97	24.23	330.	7.41	31.20	24.40
155.	7.37	30.96	24.22	335.	7.41	31.08	24.31
160.	7.36	30.97	24.23	340.	7.41	30.94	23.89
165.	7.38	30.99	24.24	345.	7.41	29.76	23.27
170.	7.38	30.99	24.24	350.	7.41	31.26	24.45



REFERENCE NO. 73-10-213 STN- J08 DATE 9/ 4/73  
POSITION 50-32.0N, 126-33.0W PST 23.5  
RESULTS OF STD CAST 64 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	7.25	30.71	24.04	388.1	0.0	0.0	1474.
10	7.25	30.77	24.09	384.1	0.39	0.02	1475.
20	7.25	30.80	24.11	382.0	0.77	0.08	1475.
30	7.24	30.84	24.14	379.1	1.15	0.18	1475.
40	7.23	30.93	24.21	372.7	1.50	0.48	1475.
50	7.25	30.97	24.24	369.8	2.83	1.07	1476.
60	7.28	30.98	24.25	369.5	3.75	1.90	1477.
75	7.29	31.01	24.27	368.2	4.68	2.55	1477.
100	7.29	31.03	24.28	367.0	5.60	4.24	1477.
125	7.30	31.04	24.29	366.4	6.51	5.76	1478.
150	7.31	31.07	24.31	364.6	7.43	7.51	1478.
175	7.32	31.09	24.33	363.5	8.34	9.48	1479.
200	7.32	31.10	24.34	362.2	9.24	11.68	1479.
225	7.33	31.10	24.34	363.5	11.06	16.77	1480.
250	7.37	31.12	24.35	363.8	14.71	29.78	1482.

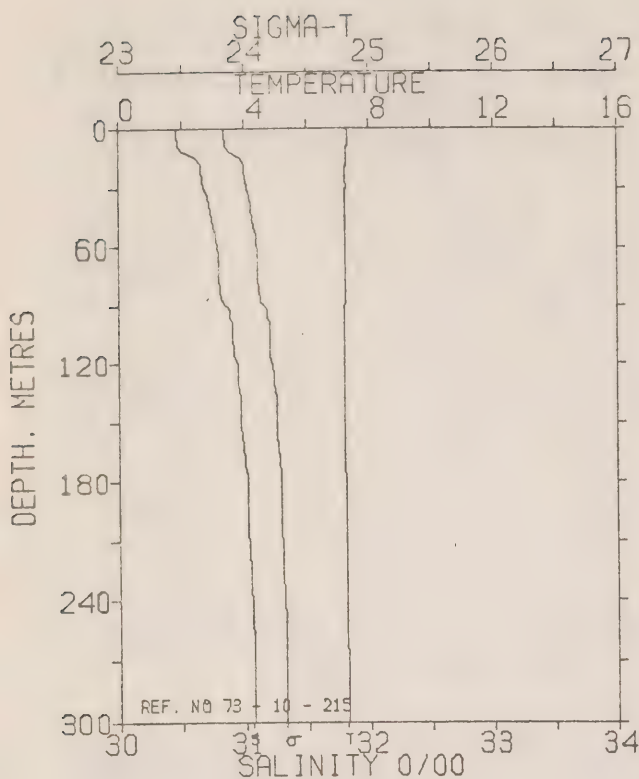
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.25	30.71	24.04	150.	7.30	31.05	24.30
5.	7.25	30.73	24.06	155.	7.30	30.98	24.24
10.	7.25	30.77	24.09	160.	7.26	31.03	24.29
15.	7.25	30.79	24.10	165.	7.31	31.02	24.28
20.	7.25	30.80	24.11	170.	7.31	31.07	24.31
25.	7.25	30.82	24.13	175.	7.31	31.10	24.34
30.	7.24	30.84	24.14	180.	7.32	30.93	23.89
35.	7.24	30.86	24.16	185.	7.32	31.11	24.34
40.	7.23	30.87	24.17	190.	7.32	31.11	24.34
45.	7.23	30.90	24.19	195.	7.32	31.11	24.34
50.	7.23	30.93	24.21	200.	7.32	31.11	24.34
55.	7.23	30.94	24.22	205.	7.32	31.11	24.34
60.	7.17	30.97	24.25	210.	7.32	31.11	24.34
65.	7.25	30.96	24.24	215.	7.32	30.83	23.13
70.	7.25	30.97	24.24	220.	7.32	31.19	24.40
75.	7.25	30.97	24.24	225.	7.32	31.10	24.34
80.	7.26	30.97	24.24	230.	7.32	31.10	24.34
85.	7.27	30.97	24.24	235.	7.30	31.08	24.32
90.	7.27	30.98	24.25	240.	7.33	30.98	24.24
95.	7.27	30.98	24.25	245.	6.97	31.13	24.41
100.	7.28	30.98	24.25	250.	7.35	30.64	23.97
105.	7.28	30.99	24.25	255.	7.35	30.93	24.20
110.	7.28	31.00	24.26	260.	7.24	30.61	23.96
115.	7.28	31.01	24.27	265.	7.36	31.03	24.27
120.	7.29	31.00	24.26	270.	7.09	31.22	24.46
125.	7.29	31.02	24.27	275.	7.37	30.98	24.23
130.	7.29	31.00	24.26	280.	7.33	31.13	24.36
135.	7.29	31.04	24.29	285.	7.39	31.25	24.44
140.	7.29	31.03	24.29	290.	7.39	31.00	24.24



REFERENCE NO. 73-10-214 STN- J07 DATE 10/ 4/73  
POSITION 50-30.0N, 126-21.0W PST 1.4  
RESULTS OF STD CAST 52 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	PCT EN	SOUND VEL
0	7.35	30.49	23.85	405.8	0.0	0.0	1475.
10	7.29	30.61	23.96	396.5	0.40	0.02	1475.
20	7.29	30.61	23.96	396.5	0.80	0.08	1475.
30	7.29	30.61	23.96	396.3	1.19	0.18	1475.
40	7.22	30.71	24.04	388.6	1.58	0.50	1475.
50	7.20	30.76	24.09	384.7	2.94	1.12	1475.
60	7.18	30.84	24.15	378.8	3.90	1.97	1476.
75	7.19	30.89	24.26	368.5	4.83	3.03	1477.
100	7.22	31.01	24.28	367.2	5.75	4.32	1477.
125	7.22	31.02	24.29	366.9	6.66	5.84	1478.
150	7.25	31.04	24.30	366.3	7.58	7.59	1478.
175	7.26	31.07	24.32	364.5	8.49	9.57	1479.
200	7.27	31.07	24.32	364.7	9.41	11.78	1479.

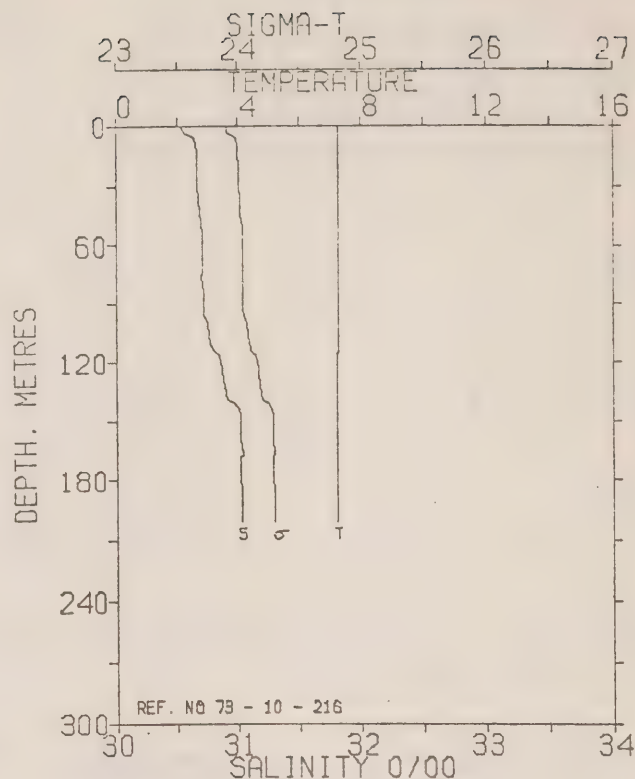
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.35	30.49	23.85	120.	7.21	30.88	24.18
5.	7.34	30.60	23.94	125.	7.10	30.50	24.21
10.	7.29	30.61	23.96	130.	7.22	31.02	24.28
15.	7.29	30.61	23.96	135.	7.22	31.00	24.27
20.	7.48	30.49	23.83	140.	7.22	31.03	24.29
25.	7.26	30.56	23.92	145.	7.18	30.98	24.26
30.	7.40	30.62	23.95	150.	7.23	31.03	24.29
35.	7.23	30.62	23.97	155.	7.17	30.97	24.25
40.	7.23	30.68	24.02	160.	7.24	31.04	24.30
45.	7.21	30.71	24.04	165.	7.20	30.95	24.23
50.	7.24	30.68	24.02	170.	7.25	31.02	24.28
55.	7.22	30.77	24.09	175.	7.22	31.03	24.30
60.	7.22	30.69	24.02	180.	7.27	31.08	24.33
65.	7.18	30.71	24.05	185.	7.27	31.08	24.33
70.	7.19	30.77	24.10	190.	7.21	31.02	24.29
75.	7.17	30.68	24.02	195.	7.28	31.09	24.33
80.	7.18	30.01	23.50	200.	7.28	30.92	24.20
85.	7.26	30.72	24.05	205.	7.38	31.10	24.32
90.	7.17	30.84	24.15	210.	7.27	31.10	24.34
95.	7.17	30.90	24.20	215.	7.27	31.10	24.34
100.	7.12	30.85	24.16	220.	7.27	30.89	24.18
105.	7.12	30.99	24.27	225.	7.27	31.10	24.34
110.	7.20	30.81	24.12	230.	7.27	31.10	24.34
115.	7.19	31.00	24.27	235.	7.27	30.47	23.85



REFERENCE NO. 73-10-215 STN- J06 DATE 10/ 4/73  
 POSITION 50-28.0N, 126- 6.0W PST 2.7  
 RESULTS OF STD CAST 47 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.28	30.46	23.84	407.2	0.0	0.0	1474.
10	7.29	30.48	23.85	406.3	0.41	0.02	1474.
20	7.24	30.65	23.99	392.9	0.81	0.08	1475.
30	7.23	30.68	24.02	390.9	1.20	0.18	1475.
50	7.22	30.75	24.07	385.7	1.97	0.50	1475.
75	7.22	30.80	24.11	382.6	2.93	1.11	1476.
100	7.20	30.90	24.19	374.8	3.88	1.55	1476.
125	7.20	30.94	24.23	372.1	4.82	3.03	1477.
150	7.20	30.97	24.25	370.5	5.74	4.33	1477.
175	7.21	31.01	24.28	367.8	6.67	5.85	1477.
200	7.22	31.02	24.28	367.5	7.58	7.61	1478.
225	7.22	31.03	24.29	366.6	8.50	9.60	1478.
250	7.23	31.06	24.31	365.3	9.42	11.81	1479.
300	7.24	31.05	24.31	366.0	11.24	16.94	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.28	30.46	23.84	100.	7.20	30.50	24.19
5.	7.29	30.47	23.84	105.	7.20	30.50	24.19
10.	7.29	30.48	23.85	110.	7.20	30.85	24.15
15.	7.26	30.61	23.96	115.	7.20	30.52	24.21
20.	7.24	30.65	23.99	120.	7.20	30.54	24.22
25.	7.24	30.66	24.00	125.	7.20	30.53	24.22
30.	7.23	30.68	24.02	130.	7.20	30.57	24.25
35.	7.23	30.71	24.04	135.	7.20	30.55	24.24
40.	7.22	30.72	24.05	140.	7.20	30.88	24.18
45.	7.22	30.72	24.05	145.	7.20	30.56	24.24
50.	7.22	30.76	24.08	150.	7.17	30.57	24.25
55.	7.22	30.80	24.11	155.	7.21	31.00	24.27
60.	7.22	30.78	24.10	160.	7.21	30.59	24.26
65.	7.22	30.77	24.09	165.	7.21	30.59	24.27
70.	7.22	30.64	23.99	170.	7.18	30.57	24.25
75.	7.35	30.69	24.01	175.	7.14	30.50	24.20
80.	7.31	30.56	23.92	180.	7.23	31.03	24.29
85.	7.21	30.84	24.14	185.	7.15	31.07	24.33
90.	7.21	30.87	24.17	190.	7.26	31.07	24.32
95.	7.21	30.87	24.17	195.	7.23	31.07	24.32

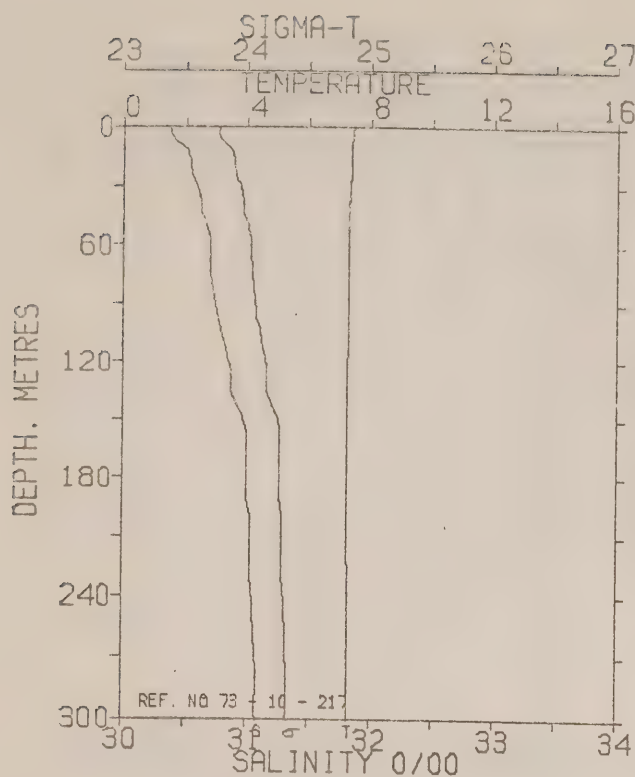


REFERENCE NO. 73-10-216 STN- J05A DATE 10/ 4/73  
 POSITION 50-26.0N, 126- 3.0W PST 3.7  
 RESULTS OF STD CAST 53 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.27	30.54	23.90	401.0	0.0	0.0	1474.
10	7.25	30.65	23.99	393.0	0.40	0.02	1474.
20	7.25	30.67	24.01	391.8	0.79	0.08	1475.
30	7.25	30.67	24.01	391.9	1.18	0.18	1475.
50	7.24	30.70	24.03	389.9	1.96	0.50	1475.
75	7.24	30.70	24.03	385.8	2.64	1.12	1476.
100	7.25	30.75	24.07	386.6	3.91	1.99	1476.
125	7.23	30.87	24.16	378.0	4.87	3.08	1477.
150	7.22	31.01	24.28	367.2	5.80	4.29	1477.
175	7.22	31.02	24.29	366.9	6.72	5.61	1478.
200	7.23	31.03	24.29	366.8	7.63	7.66	1478.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.27	30.54	23.90	100.	7.25	30.75	24.07
5.	7.27	30.62	23.97	105.	7.25	30.76	24.08
10.	7.25	30.65	23.99	110.	7.25	30.77	24.08
15.	7.25	30.66	24.00	115.	7.24	30.82	24.12
20.	7.25	30.67	24.01	120.	7.23	30.86	24.16
25.	7.25	30.66	24.00	125.	7.23	30.87	24.16
30.	7.25	30.68	24.01	130.	7.23	30.88	24.17
35.	7.25	30.67	24.01	135.	7.22	30.82	24.05
40.	7.24	30.68	24.02	140.	7.22	30.57	24.24
45.	7.24	30.69	24.02	145.	7.22	31.01	24.28
50.	7.24	30.71	24.04	150.	7.22	31.01	24.28
55.	7.24	30.71	24.04	155.	7.22	31.02	24.28
60.	7.24	30.71	24.04	160.	7.22	31.02	24.29
65.	7.24	30.70	24.03	165.	7.22	31.05	24.31
70.	7.24	30.70	24.03	170.	7.22	31.02	24.29
75.	7.25	30.71	24.04	175.	7.22	31.02	24.28
80.	7.26	30.71	24.04	180.	7.23	31.03	24.29
85.	7.25	30.69	24.02	185.	7.23	31.03	24.29
90.	7.25	30.66	24.00	190.	7.23	31.03	24.29

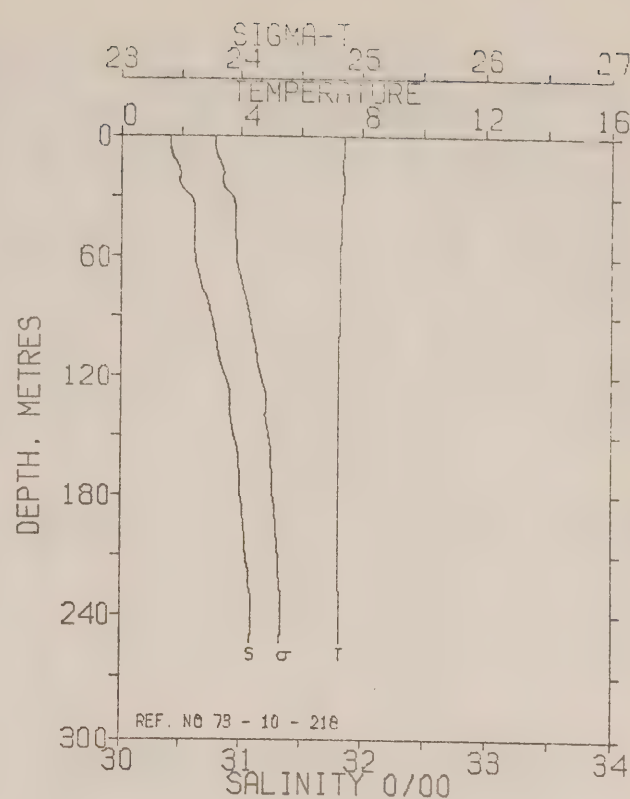




REFERENCE NO. 73-10-217 STN- J06 DATE 10/ 4/73  
 POSITION 50-28.0N, 126- 6.0W PST 20.7  
 RESULTS OF STD CAST 51 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.46	30.38	23.75	415.4	0.0	0.0	1475.
10	7.35	30.47	23.84	407.7	0.41	0.02	1475.
20	7.33	30.53	23.89	402.9	0.82	0.08	1475.
30	7.30	30.59	23.94	398.6	1.22	0.18	1475.
50	7.27	30.67	24.00	392.4	2.01	0.51	1475.
75	7.26	30.70	24.03	390.1	2.59	1.13	1476.
100	7.26	30.77	24.08	385.3	3.96	1.59	1476.
125	7.24	30.87	24.16	378.1	4.91	3.09	1477.
150	7.22	30.97	24.24	370.6	5.85	4.40	1477.
175	7.22	31.00	24.27	368.7	6.77	5.93	1478.
200	7.24	31.03	24.29	367.0	7.69	7.69	1478.
225	7.24	31.02	24.29	367.5	8.61	9.68	1478.
250	7.26	31.06	24.31	365.7	9.53	11.50	1479.
300	7.27	31.08	24.33	364.6	11.35	17.02	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.46	30.38	23.75	105.	7.25	30.87	24.16
5.	7.39	30.39	23.77	110.	7.26	30.69	24.02
10.	7.35	30.47	23.84	115.	7.22	30.73	24.05
15.	7.35	30.53	23.88	120.	7.22	30.64	24.15
20.	7.33	30.53	23.89	125.	7.22	31.00	24.28
25.	7.32	30.55	23.91	130.	7.22	30.57	24.25
30.	7.30	30.59	23.94	135.	7.18	31.01	24.28
35.	7.29	30.61	23.95	140.	7.23	30.83	24.14
40.	7.29	30.62	23.96	145.	7.23	30.65	24.15
45.	7.28	30.63	23.98	150.	7.23	31.03	24.29
50.	7.27	30.67	24.00	155.	7.16	31.03	24.30
55.	7.27	30.69	24.02	160.	7.24	30.79	24.10
60.	7.26	30.70	24.02	165.	7.18	30.51	24.21
65.	7.26	30.70	24.03	170.	7.25	30.59	24.25
70.	7.26	30.70	24.03	175.	7.25	31.07	24.32
75.	7.26	30.70	24.03	180.	7.26	30.97	24.24
80.	7.27	30.72	24.04	185.	7.26	31.00	24.26
85.	7.29	30.70	24.02	190.	7.26	31.09	24.33
90.	7.27	30.74	24.06	195.	7.26	31.09	24.33
95.	7.28	30.75	24.06	200.	7.26	30.59	23.95

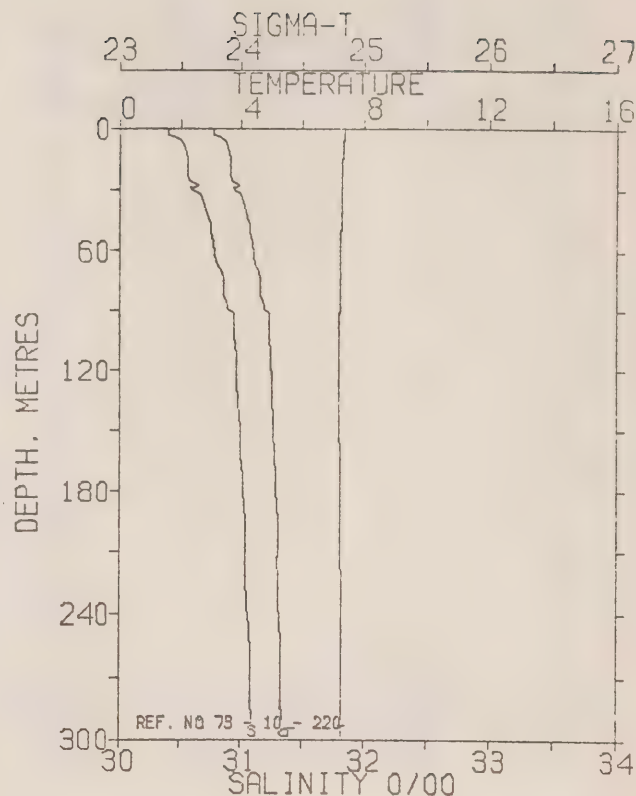
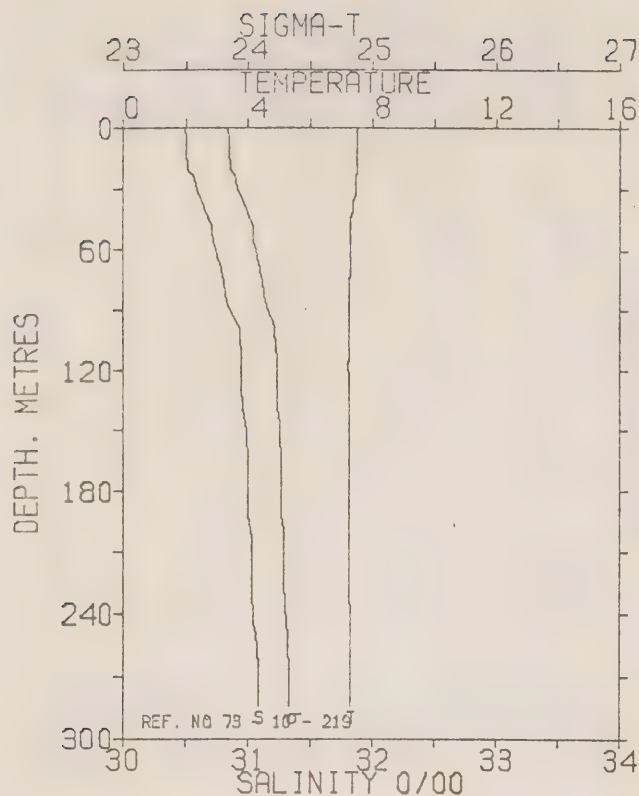


REFERENCE NO. 73-10-218 STN- JC6N DATE 10/ 4/73  
 POSITION 50-29.0N, 126- 6.0W PST 21.4  
 RESULTS OF STD CAST 53 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.42	30.41	23.78	412.7	0.0	0.0	1475.
10	7.39	30.43	23.80	411.6	0.41	0.02	1475.
20	7.37	30.49	23.85	406.7	0.82	0.08	1475.
30	7.34	30.58	23.92	399.8	1.23	0.19	1475.
50	7.30	30.61	23.95	397.3	2.02	0.51	1475.
75	7.27	30.68	24.01	392.0	3.01	1.14	1476.
100	7.24	30.79	24.10	383.5	3.98	2.00	1476.
125	7.23	30.90	24.19	375.6	4.93	3.09	1477.
150	7.22	30.95	24.23	372.0	5.86	4.40	1477.
175	7.23	30.99	24.26	369.1	6.79	5.93	1478.
200	7.23	31.03	24.29	366.4	7.71	7.69	1478.
225	7.24	31.07	24.33	363.7	8.62	9.67	1479.
250	7.25	31.08	24.33	363.7	9.53	11.67	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.42	30.41	23.78	105.	7.26	30.80	24.11
5.	7.42	30.41	23.78	110.	7.22	30.92	24.21
10.	7.39	30.43	23.80	115.	7.22	30.92	24.21
15.	7.35	30.47	23.84	120.	7.22	30.86	24.16
20.	7.37	30.49	23.85	125.	7.22	30.86	24.16
25.	7.39	30.50	23.86	130.	7.22	30.89	24.18
30.	7.34	30.58	23.92	135.	7.22	30.50	24.19
35.	7.30	30.61	23.95	140.	7.22	30.97	24.25
40.	7.30	30.61	23.95	145.	7.18	30.55	24.24
45.	7.31	30.60	23.94	150.	7.23	30.69	24.03
50.	7.33	30.62	23.95	155.	7.29	30.96	24.23
55.	7.28	30.62	23.96	160.	7.22	31.00	24.27
60.	7.27	30.62	23.96	165.	7.22	30.58	24.25
65.	7.28	30.63	23.97	170.	7.22	31.04	24.30
70.	7.28	30.64	23.98	175.	7.18	30.55	24.24
75.	7.25	30.69	24.02	180.	7.24	30.99	24.26
80.	7.26	30.72	24.05	185.	7.24	31.02	24.29
85.	7.24	30.74	24.07	190.	7.24	31.02	24.28
90.	7.24	30.76	24.08	195.	7.24	31.09	24.34
95.	7.27	30.75	24.06	200.	7.22	31.09	24.34





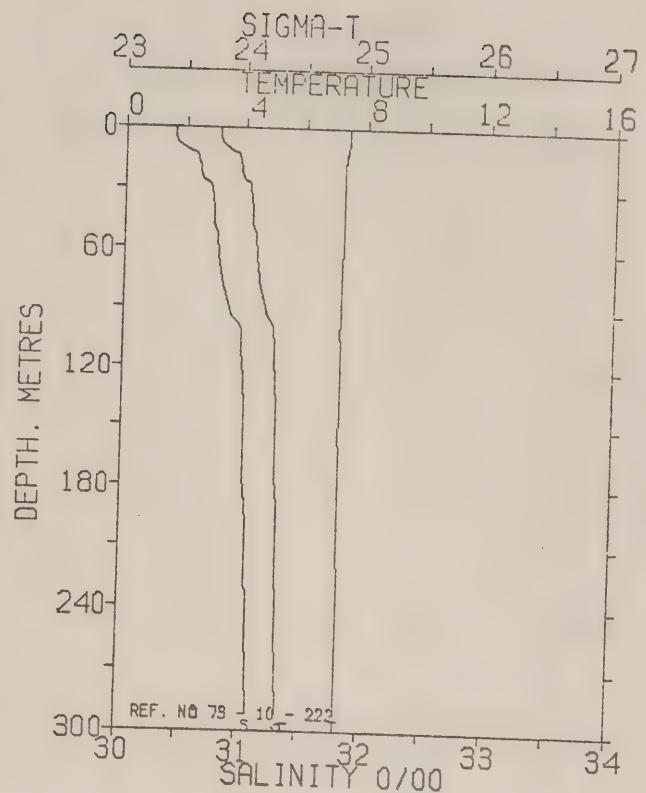
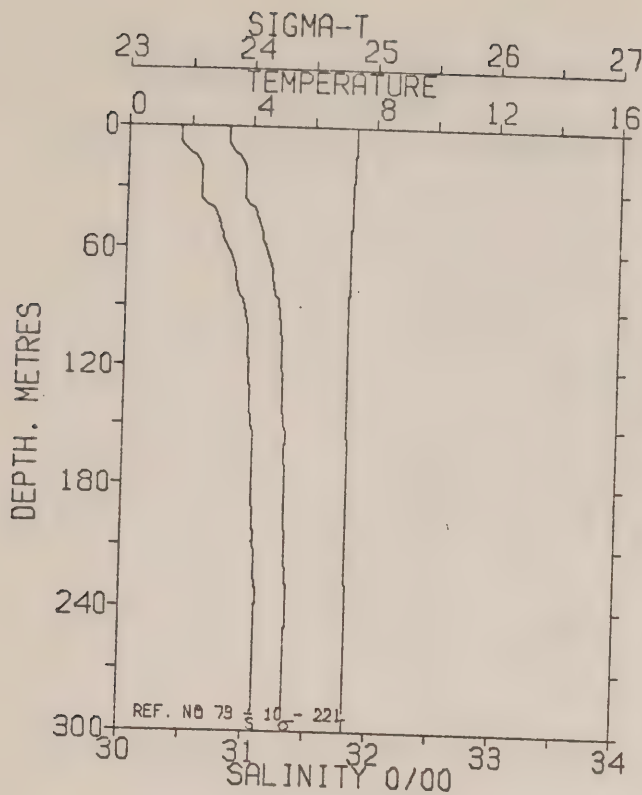
REFERENCE NO. 73-10-219 STN- J065 DATE 10/ 4/73  
POSITION 50-27.6N, 126- 6.1W PST 22.2  
RESULTS OF STD CAST 45 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	7.48	30.49	23.84	407.5	0.0	0.0	1475.
10	7.47	30.50	23.85	407.0	0.41	0.02	1475.
20	7.47	30.52	23.86	405.9	0.81	0.08	1475.
30	7.43	30.58	23.92	400.6	1.22	0.19	1475.
50	7.26	30.71	24.04	389.3	2.01	0.51	1475.
75	7.23	30.80	24.11	382.2	2.57	1.12	1476.
100	7.22	30.93	24.22	372.7	3.92	1.57	1476.
125	7.22	30.95	24.23	371.8	4.85	3.03	1477.
150	7.23	30.98	24.25	370.0	5.78	4.23	1477.
175	7.23	31.00	24.26	368.9	6.70	5.86	1478.
200	7.24	31.02	24.28	367.5	7.62	7.62	1478.
225	7.24	31.03	24.29	367.3	8.54	9.61	1478.
250	7.24	31.06	24.31	365.3	9.46	11.83	1479.

REFERENCE NO. 73-10-220 STN- J06 DATE 10/ 4/73  
POSITION 50-28.0N, 126- 6.0W PST 23.5  
RESULTS OF STD CAST 48 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	7.36	30.39	23.78	413.4	0.0	0.0	1474.
10	7.30	30.54	23.90	402.3	0.41	0.02	1475.
20	7.29	30.56	23.92	400.5	0.81	0.08	1475.
30	7.28	30.59	23.94	398.3	1.21	0.18	1475.
50	7.23	30.75	24.07	386.1	1.95	0.50	1475.
75	7.22	30.85	24.16	378.2	2.94	1.11	1476.
100	7.21	30.95	24.23	371.4	3.88	1.55	1476.
125	7.21	30.97	24.24	370.3	4.81	3.01	1477.
150	7.21	30.99	24.27	368.6	5.73	4.30	1477.
175	7.22	31.01	24.28	367.5	6.65	5.63	1478.
200	7.23	31.04	24.30	366.1	7.57	7.58	1478.
225	7.25	31.04	24.30	366.4	8.48	9.56	1478.
250	7.26	31.07	24.32	364.2	9.40	11.77	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.48	30.49	23.84	100.	7.22	30.63	24.22	0.	7.36	30.39	23.78	105.	7.21	30.56	24.24
5.	7.47	30.50	23.84	105.	7.20	30.65	24.23	5.	7.34	30.48	23.84	110.	7.21	30.55	24.23
10.	7.47	30.50	23.85	110.	7.22	30.92	24.20	10.	7.30	30.54	23.90	115.	7.21	30.58	24.25
15.	7.47	30.50	23.85	115.	7.22	30.66	24.24	15.	7.29	30.56	23.92	120.	7.21	30.54	24.23
20.	7.47	30.52	23.86	120.	7.22	30.61	24.20	20.	7.29	30.55	23.91	125.	7.21	30.57	24.24
25.	7.45	30.57	23.90	125.	7.20	30.95	24.24	25.	7.29	30.53	23.90	130.	7.21	30.58	24.26
30.	7.43	30.58	23.92	130.	7.23	30.62	24.20	30.	7.28	30.59	23.94	135.	7.21	31.01	24.28
35.	7.34	30.62	23.95	135.	7.23	31.00	24.26	35.	7.27	30.68	24.01	140.	7.19	30.58	24.26
40.	7.33	30.65	23.98	140.	7.23	30.68	24.25	40.	7.26	30.71	24.04	145.	7.22	30.58	24.25
45.	7.28	30.68	24.01	145.	7.23	31.00	24.27	45.	7.25	30.73	24.06	150.	7.22	30.58	24.25
50.	7.26	30.71	24.04	150.	7.23	30.89	24.18	50.	7.23	30.75	24.07	155.	7.22	30.59	24.26
55.	7.26	30.71	24.04	155.	7.23	31.03	24.29	55.	7.23	30.76	24.08	160.	7.20	31.04	24.31
60.	7.27	30.74	24.05	160.	7.23	31.03	24.29	60.	7.23	30.78	24.10	165.	7.21	31.02	24.29
65.	7.25	30.76	24.08	165.	7.23	30.99	24.26	65.	7.22	30.80	24.11	170.	7.24	30.53	24.21
70.	7.24	30.78	24.09	170.	7.23	30.80	24.11	70.	7.22	30.83	24.14	175.	7.24	30.75	24.07
75.	7.23	30.80	24.11	175.	7.04	30.88	24.20	75.	7.22	30.85	24.16	180.	7.25	30.58	24.25
80.	7.23	30.81	24.12	180.	7.25	31.02	24.28	80.	7.22	30.85	24.15	185.	7.18	31.01	24.28
85.	7.23	30.82	24.13	185.	6.42	31.09	24.44	85.	7.22	30.88	24.18	190.	7.26	31.09	24.33
90.	7.22	30.85	24.15	190.	7.20	31.09	24.34	90.	7.21	30.92	24.21	195.	7.26	31.09	24.33
								95.	7.21	30.94	24.23	200.	7.26	31.01	24.27



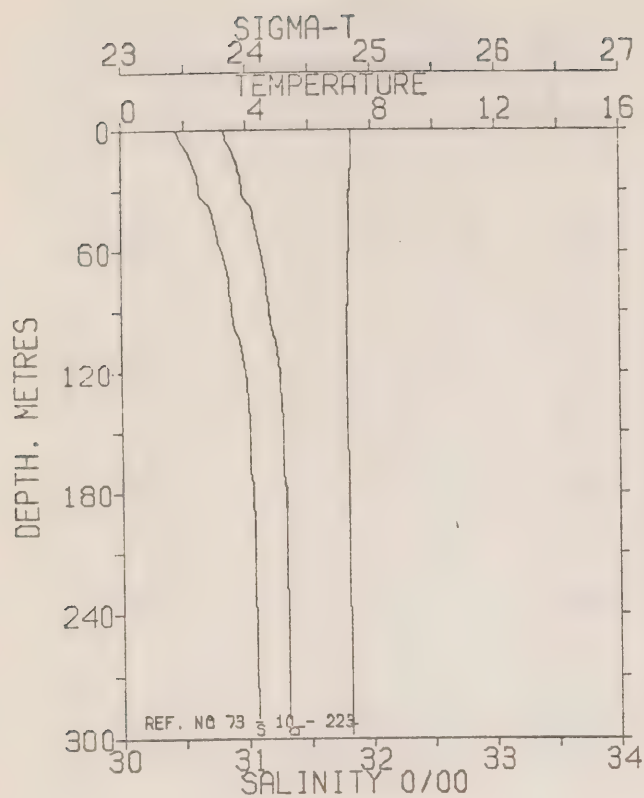
REFERENCE NO. 73-10-221 STN- J06 DATE 11/ 4/73  
POSITION 50-28.0N, 126- 6.0W PST 0.5  
RESULTS OF STD CAST 53 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.35	30.42	23.80	411.0	0.0	0.0	1474.
10	7.35	30.44	23.81	410.0	0.41	0.02	1475.
20	7.30	30.59	23.94	398.4	0.81	0.08	1475.
30	7.28	30.59	23.94	398.3	1.21	0.18	1475.
50	7.23	30.76	24.08	385.4	2.00	0.50	1475.
75	7.21	30.88	24.18	376.1	2.95	1.11	1476.
100	7.21	30.98	24.26	368.9	3.88	1.64	1476.
125	7.21	31.00	24.27	367.8	4.80	2.59	1477.
150	7.22	31.02	24.29	366.6	5.72	4.28	1477.
175	7.22	31.04	24.30	365.9	6.63	5.80	1478.
200	7.23	31.05	24.31	365.1	7.55	7.54	1478.
225	7.24	31.08	24.33	363.6	8.46	9.52	1479.
250	7.26	31.08	24.33	363.7	9.37	11.72	1479.

REFERENCE NO. 73-10-222 STN- J06 DATE 11/ 4/73  
POSITION 50-28.0N, 126- 6.0W PST 1.5  
RESULTS OF STD CAST 44 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.40	30.41	23.79	412.4	0.0	0.0	1475.
10	7.36	30.48	23.84	407.1	0.41	0.02	1475.
20	7.29	30.62	23.96	396.0	0.81	0.08	1475.
30	7.26	30.71	24.04	388.9	1.20	0.18	1475.
50	7.24	30.76	24.08	385.5	1.98	0.50	1475.
75	7.23	30.81	24.12	381.5	2.94	1.11	1476.
100	7.21	30.97	24.25	369.5	3.88	1.65	1476.
125	7.22	31.01	24.27	367.5	4.80	3.00	1477.
150	7.21	31.01	24.28	367.1	5.72	4.29	1477.
175	7.22	31.02	24.29	366.9	6.64	5.81	1478.
200	7.24	31.05	24.30	365.5	7.55	7.56	1478.
225	7.25	31.05	24.31	365.4	8.46	9.54	1479.
250	7.25	31.07	24.32	364.5	9.38	11.75	1479.

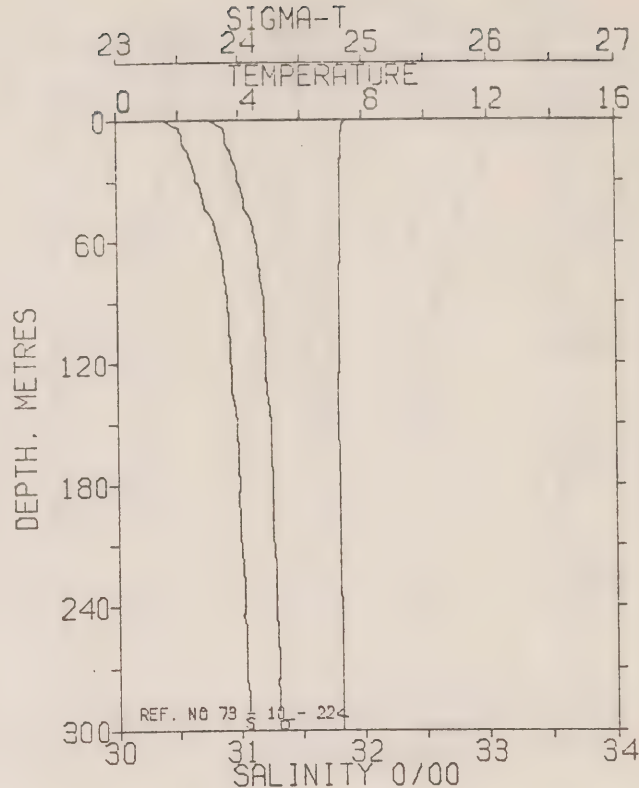
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.35	30.42	23.80	110.	7.21	30.99	24.26	0.	7.40	30.41	23.79	95.	7.22	30.96	24.24
5.	7.35	30.42	23.80	115.	7.21	31.01	24.28	5.	7.38	30.42	23.79	100.	7.22	30.99	24.27
10.	7.35	30.44	23.81	120.	7.21	30.98	24.25	10.	7.36	30.48	23.84	105.	7.27	31.02	24.28
15.	7.31	30.55	23.90	125.	7.21	30.94	24.22	15.	7.29	30.60	23.95	110.	7.19	31.00	24.27
20.	7.30	30.59	23.94	130.	7.17	31.04	24.30	20.	7.29	30.62	23.96	115.	7.22	31.03	24.29
25.	7.29	30.59	23.94	135.	7.22	31.04	24.30	25.	7.27	30.63	23.98	120.	7.22	30.93	24.22
30.	7.28	30.59	23.94	140.	7.22	31.02	24.29	30.	7.26	30.71	24.04	125.	7.22	30.95	24.23
35.	7.27	30.59	23.94	145.	7.22	31.04	24.30	35.	7.26	30.74	24.06	130.	7.17	31.00	24.27
40.	7.26	30.70	24.03	150.	7.22	31.02	24.28	40.	7.24	30.69	24.02	135.	7.23	31.06	24.31
45.	7.26	30.73	24.05	155.	7.17	31.00	24.28	45.	7.24	30.73	24.06	140.	7.16	30.99	24.27
50.	7.23	30.76	24.08	160.	7.23	31.06	24.32	50.	7.24	30.76	24.08	145.	7.24	31.06	24.32
55.	7.23	30.78	24.09	165.	7.23	30.98	24.25	55.	7.24	30.78	24.09	150.	7.24	30.80	24.11
60.	7.22	30.82	24.12	170.	7.23	31.07	24.32	60.	7.24	30.78	24.09	155.	7.24	31.00	24.27
65.	7.22	30.85	24.15	175.	7.23	30.98	24.26	65.	7.23	30.76	24.08	160.	7.24	31.08	24.33
70.	7.21	30.87	24.17	180.	7.24	31.04	24.30	70.	7.21	30.78	24.10	165.	7.24	31.02	24.28
75.	7.21	30.88	24.18	185.	7.16	31.09	24.35	75.	7.21	30.82	23.97	170.	7.24	31.09	24.34
80.	7.21	30.90	24.19	190.	7.22	31.09	24.34	80.	7.28	30.84	24.14	175.	7.20	31.04	24.31
85.	7.21	30.93	24.22	195.	7.26	31.09	24.33	85.	7.19	30.96	24.25	180.	7.26	31.10	24.34
90.	7.21	30.95	24.23	200.	7.29	31.09	24.33								
95.	7.21	30.98	24.25	205.	7.25	31.09	24.33								
100.	7.21	30.99	24.26	210.	7.25	31.09	24.33								



REFERENCE NO. 73-10-223 STN- J06 DATE 11/ 4/73  
 POSITION 50-28.0N, 126- 6.0W PST 2.5  
 RESULTS OF STD CAST 39 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.33	30.44	23.82	409.3	0.0	0.0	1474.
10	7.33	30.52	23.88	403.7	0.41	0.02	1475.
20	7.31	30.59	23.94	398.5	0.81	0.08	1475.
30	7.29	30.62	23.96	396.2	1.20	0.18	1475.
50	7.24	30.76	24.08	385.3	1.98	0.50	1475.
75	7.22	30.85	24.15	378.2	2.94	1.11	1476.
100	7.20	30.92	24.21	373.7	3.88	1.95	1476.
125	7.21	31.00	24.27	367.9	4.80	3.01	1477.
150	7.21	31.01	24.28	367.0	5.72	4.29	1477.
175	7.22	31.03	24.30	365.9	6.64	5.81	1478.
200	7.24	31.05	24.30	365.5	7.55	7.56	1478.
225	7.24	31.05	24.31	365.3	8.47	9.54	1478.
250	7.24	31.06	24.31	365.1	9.38	11.75	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0	7.33	30.44	23.82	85	7.22	30.84	24.15
5	7.33	30.47	23.84	90	7.16	30.81	24.13
10	7.33	30.52	23.88	95	7.21	30.93	24.22
15	7.33	30.56	23.91	100	7.21	30.94	24.22
20	7.31	30.59	23.94	105	7.21	30.98	24.26
25	7.30	30.61	23.95	110	7.21	31.02	24.29
30	7.29	30.62	23.96	115	7.21	31.00	24.27
35	7.27	30.66	24.00	120	7.15	30.92	24.21
40	7.26	30.72	24.04	125	7.20	31.03	24.29
45	7.25	30.73	24.06	130	7.23	31.02	24.29
50	7.24	30.76	24.08	135	7.46	31.07	24.29
55	7.24	30.78	24.09	140	7.16	31.00	24.28
60	7.22	30.81	24.12	145	7.23	31.07	24.33
65	7.23	30.83	24.14	150	7.23	31.07	24.33
70	7.23	30.84	24.14	155	7.16	31.00	24.28
75	7.20	30.88	24.18	160	7.24	31.08	24.33

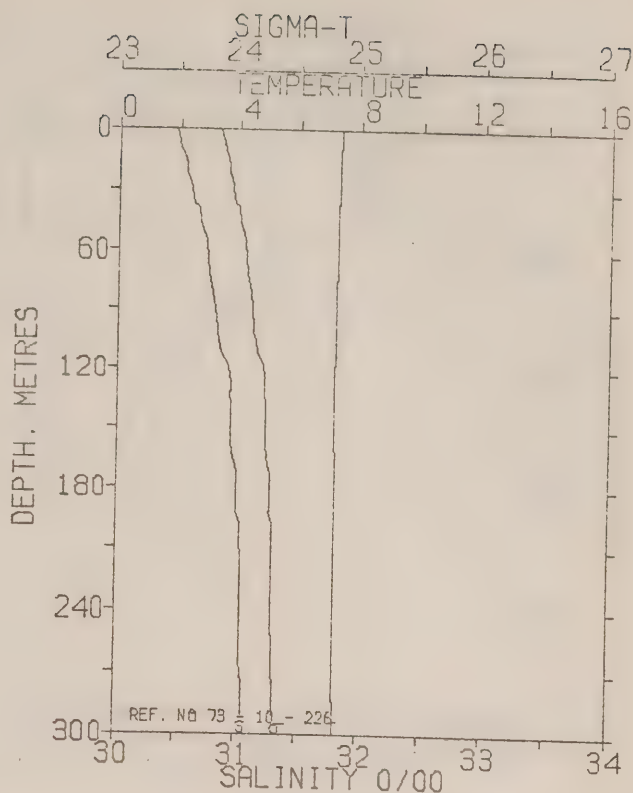
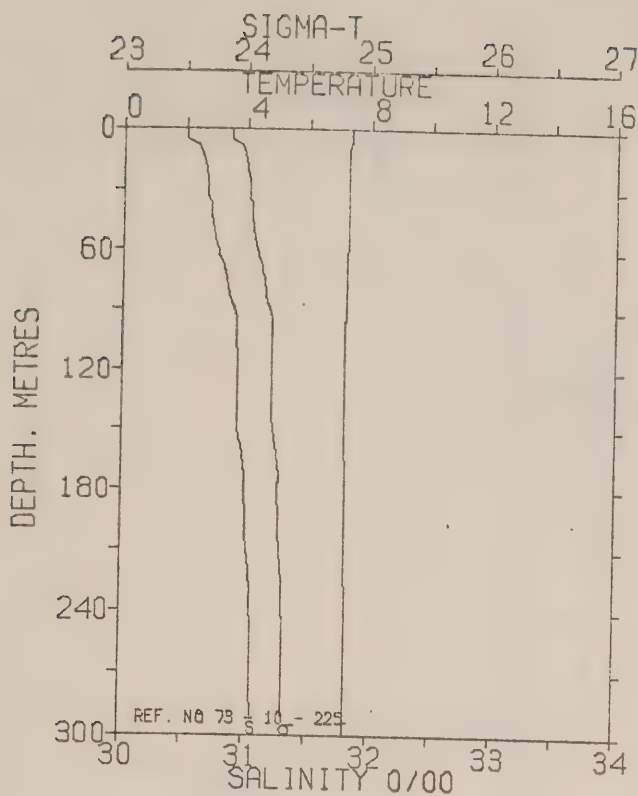


REFERENCE NO. 73-10-224 STN- J06 DATE 11/ 4/73  
 POSITION 50-28.0N, 126- 6.0W PST 3.5  
 RESULTS OF STD CAST 48 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	7.45	30.40	23.77	413.8	0.0	0.0	1475.
10	7.31	30.53	23.89	402.7	0.41	0.02	1475.
20	7.29	30.61	23.95	396.9	0.81	0.08	1475.
30	7.29	30.65	23.99	392.9	1.20	0.18	1475.
50	7.26	30.80	24.10	382.8	1.98	0.50	1475.
75	7.23	30.87	24.17	377.3	2.94	1.10	1476.
100	7.22	30.91	24.20	374.6	3.87	1.94	1476.
125	7.21	30.93	24.21	373.4	4.80	3.01	1477.
150	7.21	30.97	24.25	370.1	5.73	4.21	1477.
175	7.22	30.99	24.26	369.3	6.65	5.85	1478.
200	7.23	31.00	24.27	369.1	7.58	7.61	1478.
225	7.23	31.02	24.29	367.6	8.50	9.61	1478.
250	7.24	31.03	24.29	367.3	9.42	11.83	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0	7.45	30.40	23.77	95	7.24	30.60	24.19
5	7.32	30.52	23.88	100	7.21	30.88	24.17
10	7.31	30.53	23.89	105	7.21	30.64	24.22
15	7.30	30.58	23.93	110	7.21	30.66	24.16
20	7.29	30.61	23.95	115	7.21	30.58	24.22
25	7.29	30.63	23.97	120	7.19	30.56	24.24
30	7.29	30.65	23.99	125	7.22	30.54	24.22
35	7.27	30.69	24.02	130	7.22	31.00	24.27
40	7.27	30.71	24.03	135	7.22	30.57	24.25
45	7.26	30.74	24.06	140	7.22	31.01	24.27
50	7.26	30.80	24.10	145	7.22	30.53	24.22
55	7.26	30.81	24.12	150	7.22	30.51	24.20
60	7.25	30.84	24.14	155	7.18	31.03	24.30
65	7.23	30.86	24.15	160	7.23	31.03	24.29
70	7.24	30.85	24.15	165	7.23	30.67	24.17
75	7.22	30.90	24.19	170	7.23	31.00	24.27
80	7.23	30.90	24.19	175	7.23	31.05	24.31
85	7.22	30.85	24.15	180	7.12	30.81	24.14
90	7.22	30.92	24.21	185	7.25	31.07	24.32





REFERENCE NO. 73-10-225 STN- J06 DATE 11/ 4/73  
POSITION 50-28.0N, 126- 6.0W PST 4.5  
RESULTS OF STD CAST 50 POINTS TAKEN FROM ANALOG TRACE

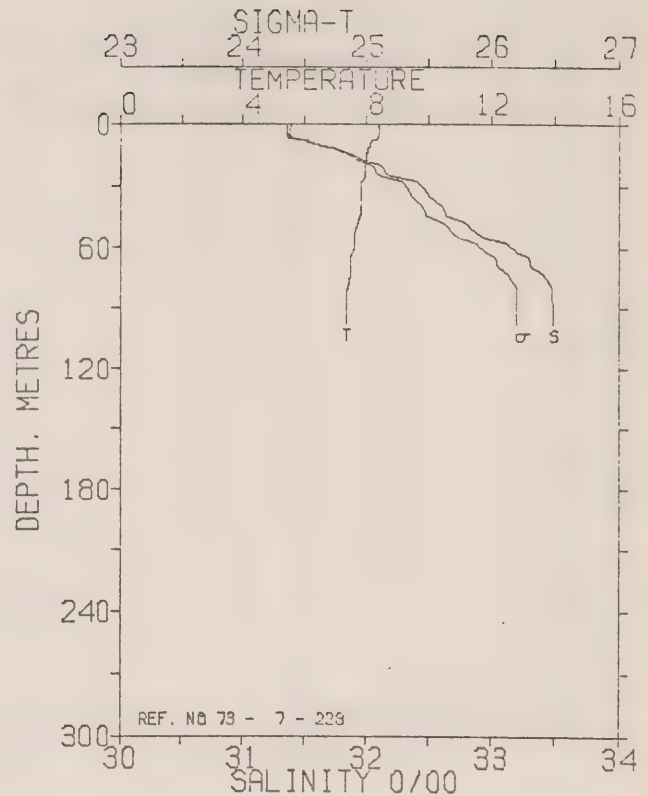
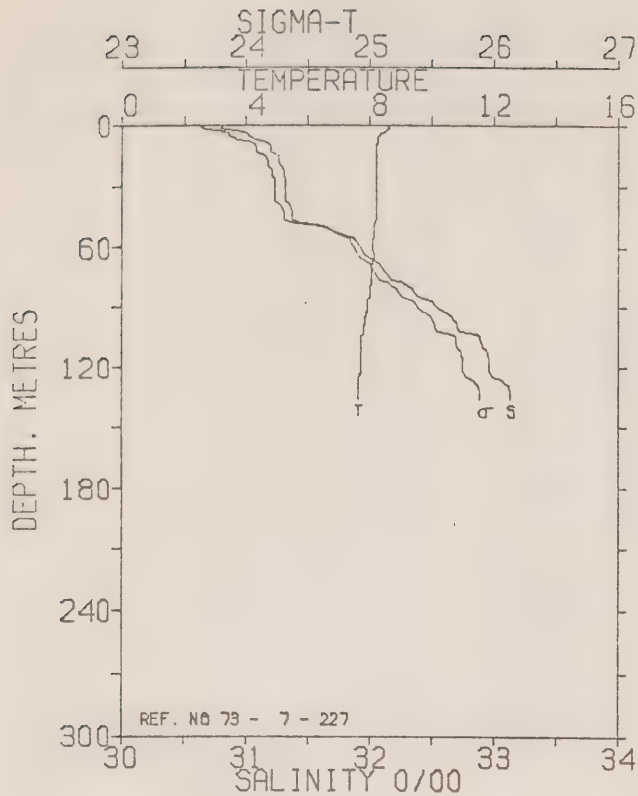
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.33	30.50	23.87	404.8	0.0	0.0	1474.
10	7.29	30.61	23.96	396.3	0.40	0.02	1475.
20	7.27	30.66	24.00	392.7	0.80	0.08	1475.
30	7.26	30.68	24.01	391.3	1.19	0.18	1475.
50	7.24	30.72	24.05	387.9	1.97	0.50	1475.
75	7.23	30.84	24.14	379.7	2.93	1.11	1476.
100	7.21	30.92	24.21	373.3	3.87	1.95	1476.
125	7.21	30.93	24.21	373.2	4.80	3.02	1477.
150	7.21	30.94	24.22	372.8	5.73	4.23	1477.
175	7.22	31.00	24.27	368.4	6.66	5.86	1478.
200	7.23	31.01	24.27	368.3	7.58	7.62	1478.
225	7.24	31.04	24.30	366.1	8.50	9.61	1478.
250	7.25	31.06	24.31	365.2	9.41	11.82	1479.

REFERENCE NO. 73-10-226 STN- J06 DATE 11/ 4/73  
POSITION 50-28.0N, 126- 6.0W PST 5.3  
RESULTS OF STD CAST 43 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	7.37	30.47	23.84	407.6	0.0	0.0	1475.
10	7.32	30.51	23.87	404.6	0.41	0.02	1475.
20	7.31	30.56	23.91	401.1	0.81	0.08	1475.
30	7.30	30.60	23.95	397.5	1.21	0.18	1475.
50	7.26	30.70	24.03	390.1	2.00	0.50	1475.
75	7.24	30.76	24.08	385.2	2.96	1.12	1476.
100	7.23	30.82	24.12	381.4	3.92	1.98	1476.
125	7.21	30.93	24.22	372.7	4.66	3.06	1477.
150	7.20	30.94	24.23	372.2	5.80	4.26	1477.
175	7.21	31.00	24.27	368.4	6.72	5.90	1477.
200	7.22	31.03	24.29	366.7	7.64	7.66	1478.
225	7.23	31.03	24.30	366.6	8.56	9.64	1478.
250	7.23	31.03	24.29	367.2	9.48	11.86	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	7.33	30.50	23.87	105.	7.21	30.53	24.22	0.	7.37	30.47	23.84	100.	7.25	30.54	24.22
5.	7.33	30.50	23.87	110.	7.21	30.53	24.22	5.	7.33	30.49	23.86	105.	7.20	30.50	24.20
10.	7.29	30.61	23.96	115.	7.21	30.61	23.96	10.	7.32	30.50	23.87	110.	7.20	30.55	24.23
15.	7.27	30.64	23.98	120.	7.21	30.50	24.19	15.	7.31	30.54	23.90	115.	7.20	30.55	24.23
20.	7.27	30.66	24.00	125.	7.21	30.75	24.07	20.	7.31	30.56	23.91	120.	7.14	30.84	24.15
25.	7.26	30.68	24.01	130.	7.21	30.89	24.19	25.	7.30	30.58	23.93	125.	7.21	30.77	24.09
30.	7.26	30.68	24.01	135.	7.12	31.01	24.29	30.	7.30	30.60	23.95	130.	7.21	30.79	24.11
35.	7.26	30.69	24.02	140.	7.22	30.59	24.26	35.	7.28	30.59	23.94	135.	7.21	31.01	24.28
40.	7.24	30.71	24.04	145.	7.22	30.54	24.23	40.	7.28	30.66	24.00	140.	7.21	30.74	24.07
45.	7.24	30.71	24.04	150.	7.22	30.50	24.19	45.	7.27	30.67	24.00	145.	7.21	31.03	24.30
50.	7.24	30.67	24.01	155.	7.11	30.93	24.23	50.	7.25	30.73	24.05	150.	7.19	31.01	24.28
55.	7.29	30.77	24.08	160.	7.23	30.89	24.18	55.	7.25	30.72	24.05	155.	7.22	31.04	24.30
60.	7.23	30.76	24.08	165.	7.10	31.06	24.33	60.	7.26	30.72	24.04	160.	7.22	31.04	24.30
65.	7.23	30.79	24.11	170.	7.24	30.53	24.31	65.	7.23	30.74	24.07	165.	7.22	30.76	24.08
70.	7.23	30.82	24.12	175.	7.24	31.07	24.32	70.	7.23	30.75	24.07	170.	7.22	31.05	24.31
75.	7.23	30.84	24.14	180.	7.25	31.07	24.32	75.	7.25	30.78	24.09	175.	7.22	31.05	24.31
80.	7.23	30.85	24.15	185.	7.25	31.07	24.32	80.	7.23	30.71	24.04	180.	7.23	30.83	24.14
85.	7.23	30.86	24.16	190.	7.25	31.07	24.32	85.	7.26	30.77	24.09	185.	7.23	30.54	24.22
90.	7.22	30.91	24.20	195.	7.25	31.07	24.32	90.	7.25	30.67	24.01	190.	7.23	31.07	24.32
95.	7.21	30.92	24.21	200.	7.25	31.00	24.27	95.	7.21	30.85	24.16	195.	7.16	31.07	24.33





REFERENCE NO. 73- 7-227 STN- JF6 DATE 12/ 4/73  
 POSITION 48-14.6N, 123- 5.5W PST 23.2  
 RESULTS OF STD CAST 81 POINTS TAKEN FROM ANALOG TRACE

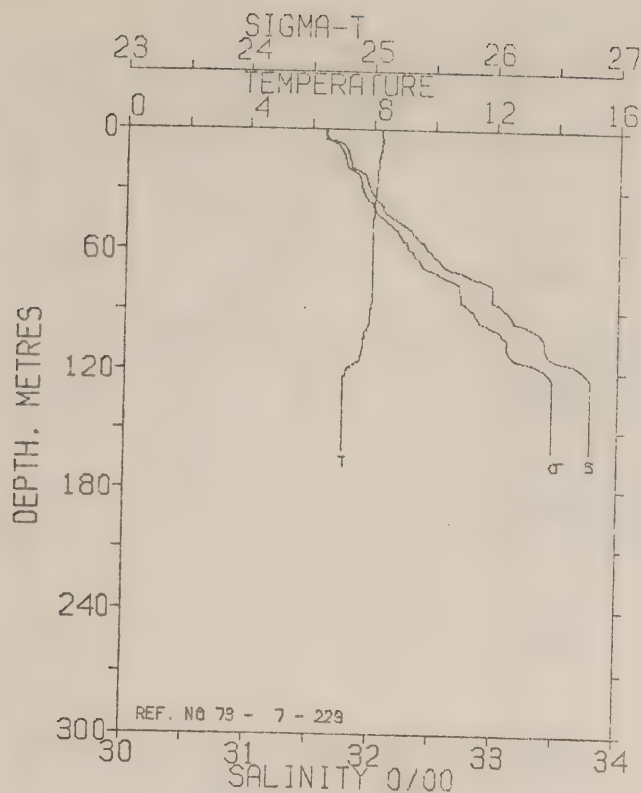
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.57	30.64	23.80	410.8	0.0	0.0	1479.
10	8.22	31.08	24.19	374.1	0.39	0.02	1479.
20	8.19	31.18	24.28	366.0	0.76	0.08	1479.
30	8.18	31.23	24.32	362.4	1.12	0.17	1479.
50	8.11	31.65	24.65	330.7	1.84	0.46	1480.
75	8.04	32.16	25.06	291.9	2.61	0.95	1481.
100	7.80	32.70	25.52	248.7	3.28	1.54	1481.
125	7.64	32.99	25.77	225.5	3.85	2.20	1481.

REFERENCE NO. 73- 7-228 STN- JF7 DATE 13/ 4/73  
 POSITION 48-16.0N, 123-20.0W PST 0.3  
 RESULTS OF STD CAST 68 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.39	31.35	24.38	355.5	0.0	0.0	1480.
10	8.13	31.60	24.62	333.7	0.35	0.02	1479.
20	7.96	32.11	25.04	293.6	0.66	0.07	1479.
30	7.83	32.44	25.32	267.0	0.95	0.14	1479.
50	7.64	32.84	25.65	235.6	1.46	0.34	1480.
75	7.44	33.43	26.15	188.7	1.58	0.67	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.57	30.64	23.80	70.	8.06	32.09	25.01
5.	8.28	30.86	24.01	75.	8.04	32.16	25.06
10.	8.22	31.08	24.19	80.	7.99	32.34	25.22
15.	8.19	31.16	24.26	85.	7.95	32.42	25.28
20.	8.19	31.18	24.28	90.	7.90	32.54	25.39
25.	8.18	31.21	24.30	95.	7.82	32.67	25.49
30.	8.18	31.23	24.32	100.	7.80	32.70	25.52
35.	8.18	31.19	24.28	105.	7.69	32.89	25.69
40.	8.18	31.28	24.35	110.	7.69	32.51	25.70
45.	8.18	31.30	24.37	115.	7.67	32.56	25.74
50.	8.11	31.65	24.65	120.	7.67	32.96	25.74
55.	8.11	31.87	24.82	125.	7.64	32.59	25.77
60.	8.09	31.92	24.87	130.	7.62	33.12	25.88
65.	8.09	31.99	24.93	135.	7.61	33.13	25.88

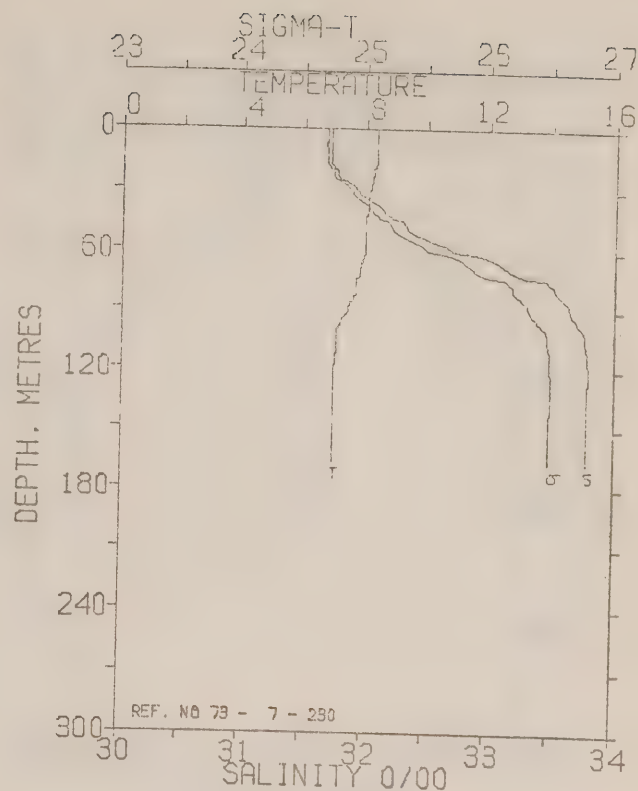
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.39	31.35	24.38	50.	7.64	32.84	25.65
5.	8.44	31.35	24.38	55.	7.61	32.95	25.74
10.	8.13	31.60	24.62	60.	7.58	33.16	25.91
15.	8.00	31.87	24.84	65.	7.50	33.29	26.03
20.	7.96	32.11	25.04	70.	7.47	33.33	26.07
25.	7.94	32.20	25.11	75.	7.44	33.43	26.15
30.	7.83	32.44	25.32	80.	7.37	33.48	26.19
35.	7.85	32.51	25.37	85.	7.36	33.48	26.20
40.	7.83	32.61	25.45	90.	7.35	33.49	26.21
45.	7.76	32.65	25.49	95.	7.34	33.49	26.21



REFERENCE NO. 73-7-229 STN- JF6 DATE 13/ 4/73  
 POSITION 48-14.5N, 123-34.6W PST 1.5  
 RESULTS OF STD CAST 85 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.27	31.61	24.60	334.4	0.0	0.0	1480.
10	8.26	31.77	24.73	322.9	0.33	0.02	1480.
20	8.13	31.87	24.82	314.3	0.65	0.07	1480.
30	8.09	31.97	24.91	305.7	0.96	0.14	1480.
50	7.97	32.32	25.20	278.9	1.55	0.38	1480.
75	7.97	32.91	25.66	235.2	2.21	0.80	1481.
100	7.78	33.35	26.04	200.0	2.76	1.30	1482.
125	7.05	33.78	26.47	158.7	3.22	1.82	1480.
150	7.05	33.77	26.47	159.4	3.62	2.27	1480.

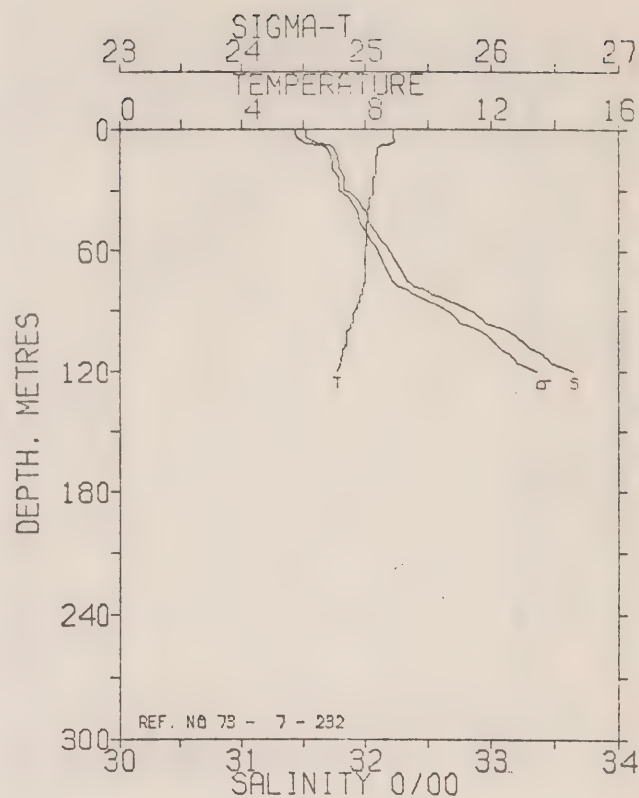
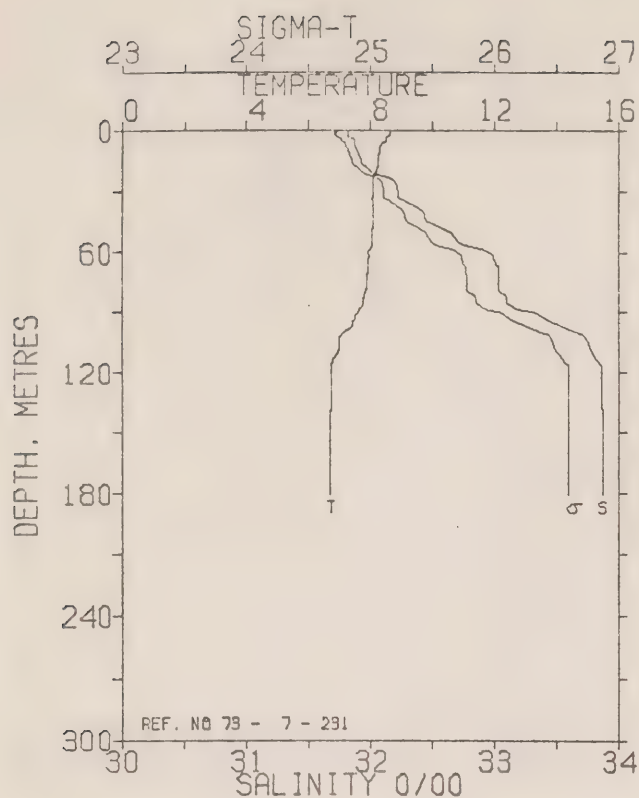
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.27	31.61	24.60	80.	7.98	32.98	25.71
5.	8.29	31.62	24.61	85.	7.98	32.98	25.72
10.	8.26	31.77	24.73	90.	7.91	33.10	25.82
15.	8.15	31.81	24.77	95.	7.89	33.15	25.86
20.	8.13	31.87	24.82	100.	7.78	33.35	26.04
25.	8.10	31.94	24.88	105.	7.70	33.41	26.09
30.	8.09	31.97	24.91	110.	7.66	33.42	26.11
35.	8.08	32.03	24.96	115.	7.51	33.55	26.23
40.	8.04	32.09	25.01	120.	7.16	33.72	26.41
45.	7.99	32.20	25.10	125.	7.05	33.78	26.47
50.	7.97	32.32	25.20	130.	7.05	33.78	26.47
55.	7.98	32.38	25.24	135.	7.05	33.78	26.47
60.	7.98	32.47	25.31	140.	7.05	33.78	26.47
65.	7.98	32.55	25.38	145.	7.05	33.77	26.47
70.	7.98	32.64	25.45	150.	7.05	33.77	26.47
75.	7.97	32.91	25.66	155.	7.05	33.77	26.47



REFERENCE NO. 73-7-230 STN- JF5 DATE 13/ 4/73  
 POSITION 48-16.5N, 123-50.0W PST 3.2  
 RESULTS OF STD CAST 90 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.34	31.71	24.67	327.9	0.0	0.0	1480.
10	8.34	31.71	24.67	328.5	0.33	0.02	1480.
20	8.22	31.76	24.72	323.6	0.66	0.07	1480.
30	8.11	31.92	24.87	310.1	0.97	0.15	1480.
50	7.99	32.35	25.22	276.5	1.56	0.39	1480.
75	7.67	33.47	26.15	189.0	2.15	0.76	1481.
100	7.08	33.76	26.46	160.0	2.59	1.15	1479.
125	6.99	33.80	26.50	156.6	2.98	1.60	1479.
150	6.99	33.79	26.49	157.1	3.37	2.15	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.34	31.71	24.67	85.	7.55	33.62	26.28
5.	8.34	31.71	24.67	90.	7.44	33.65	26.32
10.	8.34	31.71	24.67	95.	7.23	33.70	26.39
15.	8.33	31.71	24.67	100.	7.08	32.76	26.46
20.	8.22	31.76	24.72	105.	7.06	33.77	26.47
25.	8.19	31.79	24.75	110.	7.02	33.78	26.48
30.	8.11	31.92	24.87	115.	7.01	33.79	26.49
35.	8.06	32.03	24.96	120.	7.00	33.80	26.50
40.	8.07	32.14	25.04	125.	6.99	33.80	26.50
45.	7.99	32.29	25.18	130.	6.96	33.80	26.50
50.	7.99	32.35	25.22	135.	6.98	33.80	26.50
55.	7.99	32.53	25.36	140.	6.96	33.80	26.50
60.	8.01	32.72	25.50	145.	6.96	33.79	26.49
65.	7.89	33.06	25.79	150.	7.01	33.79	26.49
70.	7.83	33.16	25.88	155.	6.98	33.79	26.50
75.	7.67	33.47	26.15	160.	6.97	33.79	26.50
80.	7.69	33.53	26.19	165.	6.97	33.79	26.50



REFERENCE NO. 73-7-231 STN- JF4 DATE 13/ 4/73  
 POSITION 48-18.2N, 124- 4.5W PST 4.2  
 RESULTS OF STD CAST 81 POINTS TAKEN FROM ANALCG TRACE

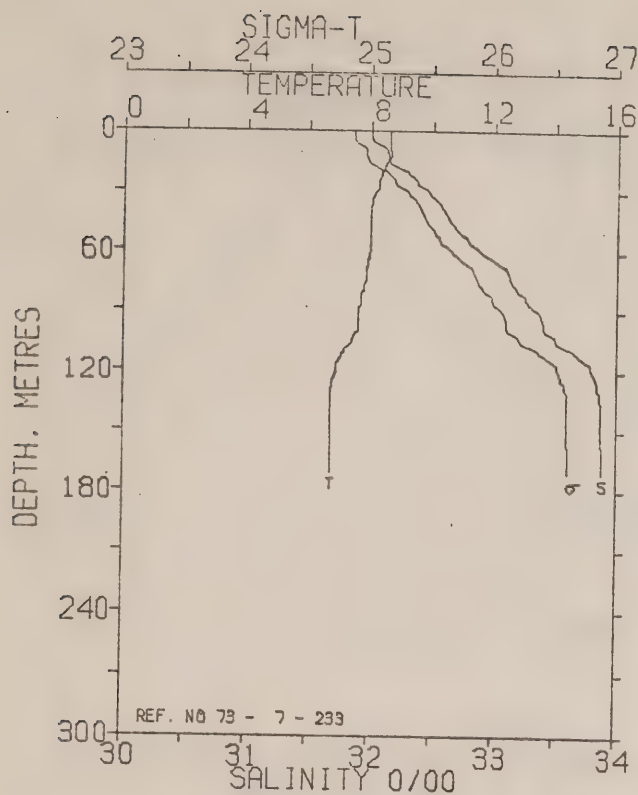
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA T	POT EN	SOUND VEL
0	8.61	31.82	24.72	323.6	0.0	0.0	1481.
10	8.29	31.89	24.82	314.3	0.32	0.02	1480.
20	8.17	32.00	24.92	305.1	0.63	0.06	1480.
30	8.07	32.22	25.11	287.2	0.92	0.14	1480.
40	8.03	32.65	25.45	255.1	1.47	0.36	1481.
50	7.87	33.03	25.77	224.4	2.06	0.73	1481.
75	7.10	33.65	26.37	168.5	2.57	1.19	1479.
100	6.68	33.87	26.59	147.3	2.95	1.62	1478.
125	6.67	33.87	26.60	147.0	3.32	2.14	1479.
175	6.67	33.87	26.60	147.6	3.69	2.75	1479.

REFERENCE NO. 73-7-232 STN- JF13 DATE 13/ 4/73  
 POSITION 48-21.6N, 124- 0.7W PST 19.5  
 RESULTS OF STD CAST 53 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA T	POT EN	SOUND VEL
0	8.88	31.51	24.44	350.5	0.0	0.0	1482.
10	8.37	31.75	24.70	326.0	0.34	0.02	1480.
20	8.31	31.79	24.74	322.3	0.67	0.07	1480.
30	8.24	31.83	24.78	318.6	0.99	0.15	1480.
40	8.04	32.08	25.00	297.7	1.60	0.40	1480.
50	7.96	32.33	25.21	278.2	2.32	0.85	1481.
100	7.42	33.15	25.93	210.4	2.93	1.40	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.61	31.82	24.72	70.	7.88	33.02	25.77
5.	8.52	31.87	24.77	75.	7.87	33.03	25.77
10.	8.29	31.89	24.82	80.	7.79	33.05	25.80
15.	8.24	31.92	24.85	85.	7.74	33.10	25.85
20.	8.17	32.00	24.92	90.	7.54	33.32	26.05
25.	8.07	32.18	25.08	95.	7.38	33.49	26.20
30.	8.07	32.22	25.11	100.	7.10	33.65	26.37
35.	8.07	32.29	25.16	105.	6.55	33.76	26.47
40.	8.09	32.43	25.27	110.	6.88	33.79	26.51
45.	8.08	32.47	25.30	115.	6.71	33.84	26.57
50.	8.03	32.65	25.45	120.	6.70	33.87	26.59
55.	8.02	32.71	25.50	125.	6.68	33.87	26.59
60.	7.93	32.95	25.70	130.	6.72	33.83	26.56
65.	7.91	33.00	25.74	135.	6.67	33.88	26.60

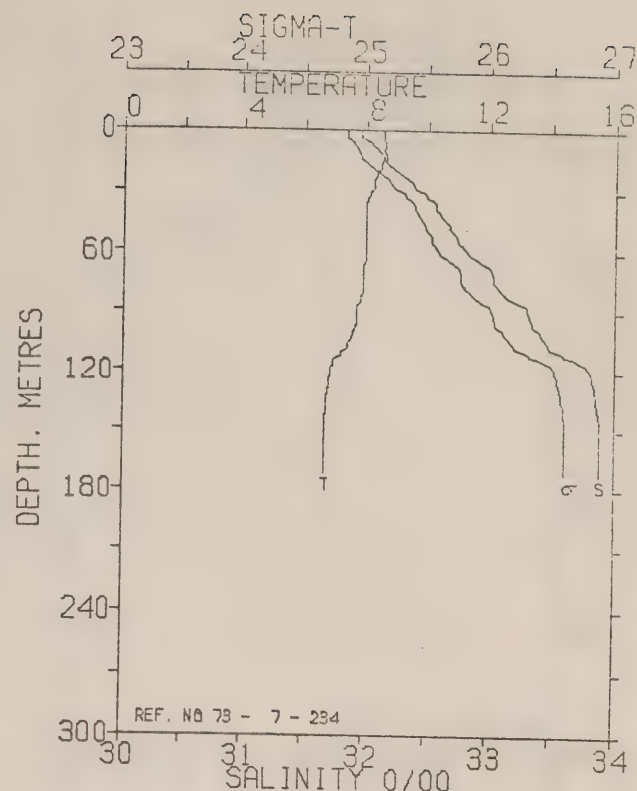
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.88	31.51	24.44	65.	8.03	32.24	25.13
5.	8.90	31.55	24.46	70.	8.01	32.15	25.06
10.	8.37	31.75	24.70	75.	7.96	32.35	25.22
15.	8.32	31.77	24.72	80.	7.89	32.49	25.35
20.	8.31	31.79	24.74	85.	7.81	32.66	25.49
25.	8.24	31.83	24.78	90.	7.66	32.84	25.65
30.	8.24	31.83	24.78	95.	7.58	32.94	25.74
35.	8.10	31.94	24.88	100.	7.42	33.15	25.93
40.	8.07	32.00	24.93	105.	7.36	33.25	26.02
45.	8.05	32.02	24.96	110.	7.27	33.37	26.12
50.	8.04	32.08	25.00	115.	7.23	33.47	26.21
55.	8.02	32.13	25.04	120.	7.07	33.65	26.37



REFERENCE NO. 73- 7-233 STN- JF12 DATE 13/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 20.2  
 RESULTS OF STD CAST 89 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.60	32.00	24.86	310.0	0.0	0.0	1481.0
10	8.60	32.12	24.95	301.4	0.31	0.02	1482.0
20	8.36	32.28	25.11	286.5	0.60	0.06	1481.0
30	8.12	32.47	25.30	269.2	0.88	0.13	1481.0
50	7.99	32.71	25.51	249.6	1.40	0.34	1481.0
75	7.84	33.14	25.86	215.8	1.98	0.71	1481.0
100	7.58	33.42	26.12	192.1	2.49	1.16	1481.0
125	6.76	33.84	26.56	150.5	2.90	1.63	1479.0
150	6.68	33.87	26.60	147.1	3.27	2.15	1479.0

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.60	32.00	24.86	80.	7.74	33.19	25.92
5.	8.59	32.01	24.87	85.	7.70	33.27	25.99
10.	8.60	32.12	24.95	90.	7.63	33.26	26.07
15.	8.52	32.14	24.98	95.	7.60	33.29	26.09
20.	8.36	32.28	25.11	100.	7.58	33.42	26.12
25.	8.27	32.37	25.20	105.	7.37	33.50	26.21
30.	8.12	32.47	25.30	110.	7.13	33.66	26.37
35.	8.03	32.54	25.36	115.	6.90	33.78	26.49
40.	8.00	32.59	25.41	120.	6.85	33.80	26.52
45.	8.00	32.64	25.44	125.	6.76	33.84	26.56
50.	7.99	32.71	25.51	130.	6.71	33.87	26.59
55.	7.99	32.79	25.56	135.	6.69	33.87	26.60
60.	7.97	32.90	25.65	140.	6.69	33.88	26.60
65.	7.90	33.00	25.75	145.	6.68	33.87	26.60
70.	7.87	33.10	25.83	150.	6.68	33.87	26.59
75.	7.84	33.14	25.86	155.	6.68	33.88	26.61

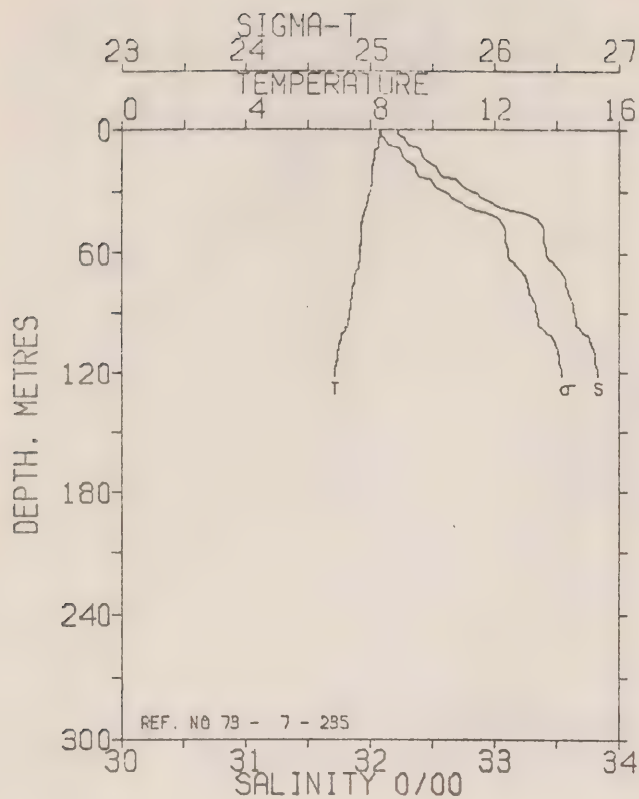


REFERENCE NO. 73- 7-234 STN- JF12 DATE 13/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 20.7  
 RESULTS OF STD CAST 88 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.55	31.96	24.84	312.3	0.0	0.0	1481.0
10	8.57	32.08	24.93	304.3	0.31	0.02	1481.0
20	8.36	32.24	25.08	289.5	0.61	0.06	1481.0
30	8.12	32.45	25.28	270.7	0.89	0.13	1481.0
50	7.98	32.70	25.50	250.2	1.41	0.34	1481.0
75	7.91	33.03	25.77	225.2	2.00	0.72	1481.0
100	7.58	33.40	26.10	193.5	2.52	1.18	1481.0
125	6.80	33.83	26.55	151.7	2.94	1.67	1479.0
150	6.67	33.88	26.61	146.2	3.31	2.18	1479.0

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.55	31.96	24.84	75.	7.91	33.03	25.77
5.	8.56	32.01	24.87	80.	7.87	33.10	25.83
10.	8.57	32.08	24.93	85.	7.80	33.23	25.94
15.	8.52	32.13	24.97	90.	7.69	33.31	26.02
20.	8.36	32.24	25.08	95.	7.67	33.34	26.04
25.	8.24	32.35	25.18	100.	7.58	33.40	26.10
30.	8.12	32.45	25.28	105.	7.45	33.46	26.17
35.	8.01	32.55	25.37	110.	7.21	33.58	26.30
40.	8.00	32.59	25.41	115.	6.92	33.73	26.46
45.	7.99	32.65	25.45	120.	6.84	33.81	26.53
50.	7.98	32.70	25.50	125.	6.80	33.83	26.55
55.	7.98	32.75	25.53	130.	6.74	33.85	26.57
60.	7.99	32.82	25.59	135.	6.71	33.86	26.58
65.	7.94	32.93	25.69	140.	6.68	33.87	26.60
70.	7.92	33.02	25.76	145.	6.67	33.88	26.61

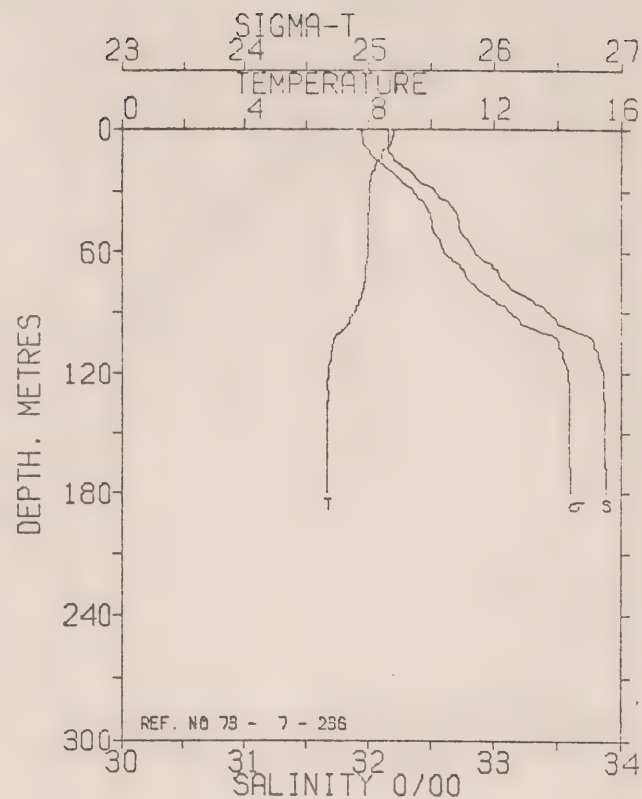




REFERENCE NO. 73- 7-235 STN- JF11 DATE 13/ 4/73  
 POSITION 48-14.6N, 124- 5.0W PST 21.4  
 RESULTS OF STD CAST 75 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.31	32.21	25.07	290.3	0.0	0.0	1480.
10	8.13	32.40	25.24	274.1	0.28	0.01	1480.
20	8.05	32.54	25.36	262.8	0.55	0.06	1480.
30	7.97	32.63	25.60	240.4	0.81	0.12	1480.
50	7.69	33.40	26.08	194.6	1.23	0.29	1480.
75	7.43	33.58	26.26	177.9	1.70	0.59	1480.
100	7.07	33.71	26.42	163.6	2.14	0.97	1479.

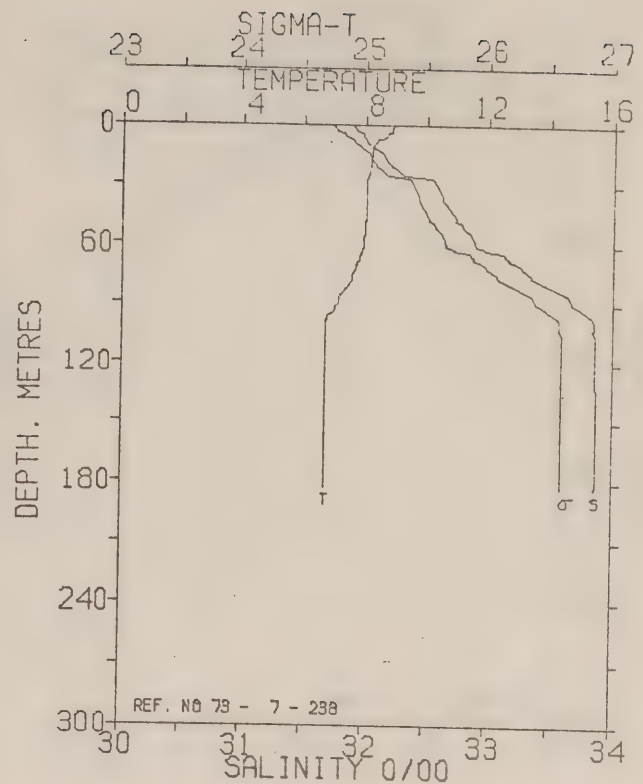
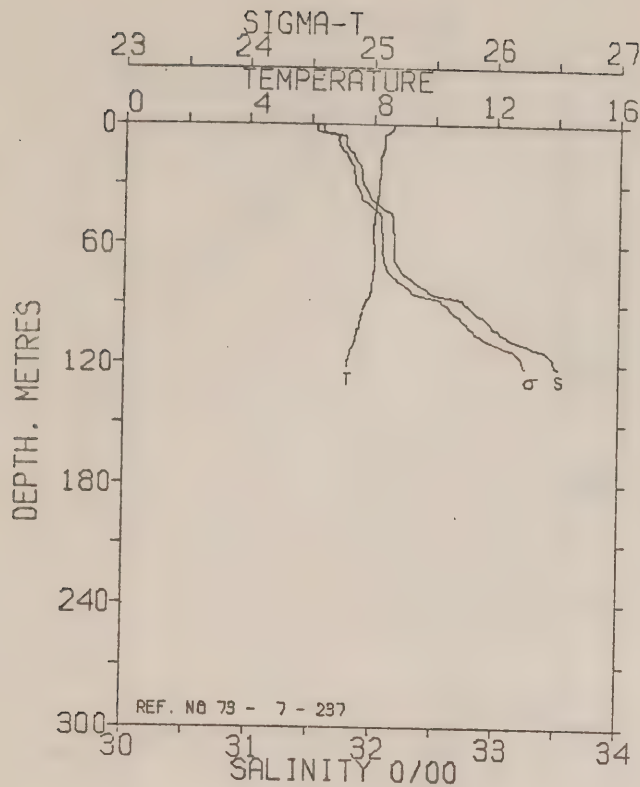
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.31	32.21	25.07	65.	7.62	33.48	26.16
5.	8.26	32.27	25.12	70.	7.51	33.54	26.23
10.	8.13	32.40	25.24	75.	7.43	33.58	26.26
15.	8.09	32.44	25.28	80.	7.41	33.59	26.28
20.	8.05	32.54	25.36	85.	7.34	33.64	26.32
25.	8.03	32.69	25.49	90.	7.30	33.65	26.34
30.	7.97	32.83	25.60	95.	7.28	33.66	26.35
35.	7.88	32.98	25.73	100.	7.07	33.71	26.42
40.	7.79	33.20	25.91	105.	6.97	33.78	26.49
45.	7.69	33.36	26.05	110.	6.92	33.81	26.52
50.	7.69	33.40	26.08	115.	6.87	33.81	26.52
55.	7.66	33.40	26.09	120.	6.84	33.83	26.54



REFERENCE NO. 73- 7-236 STN- JF12 DATE 13/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 22.0  
 RESULTS OF STD CAST 90 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.80	32.15	24.95	301.8	0.0	0.0	1482.
10	8.49	32.15	24.99	297.8	0.30	0.02	1481.
20	8.15	32.33	25.18	280.1	0.59	0.06	1480.
30	8.05	32.53	25.36	263.4	0.86	0.13	1480.
50	8.00	32.74	25.52	248.1	1.37	0.33	1481.
75	7.87	33.09	25.82	220.1	1.56	0.71	1481.
100	7.07	33.67	26.39	166.6	2.45	1.14	1479.
125	6.68	33.87	26.59	147.3	2.83	1.58	1478.
150	6.67	33.87	26.60	147.0	3.19	2.09	1479.
175	6.67	33.88	26.60	147.0	3.56	2.70	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.80	32.15	24.95	75.	7.87	33.09	25.82
5.	8.77	32.15	24.95	80.	7.79	33.19	25.91
10.	8.49	32.15	24.99	85.	7.69	33.32	26.03
15.	8.26	32.20	25.07	90.	7.54	33.43	26.13
20.	8.15	32.33	25.18	95.	7.35	33.50	26.21
25.	8.05	32.41	25.26	100.	7.07	33.67	26.39
30.	8.05	32.53	25.36	105.	6.87	33.79	26.51
35.	8.02	32.64	25.45	110.	6.81	33.82	26.54
40.	8.02	32.69	25.48	115.	6.74	33.84	26.56
45.	8.01	32.71	25.50	120.	6.69	33.86	26.58
50.	8.00	32.74	25.52	125.	6.68	33.87	26.59
55.	7.99	32.80	25.58	130.	6.68	33.87	26.59
60.	7.98	32.85	25.61	135.	6.67	33.88	26.60
65.	7.93	32.95	25.70	140.	6.67	33.88	26.60
70.	7.92	33.04	25.77	145.	6.67	33.87	26.60



REFERENCE NO. 73- 7-237 STN- JF13 DATE 13/ 4/73  
 POSITION 48-21.6N, 124- 0.7W PST 22.5  
 RESULTS OF STD CAST 71 POINTS TAKEN FROM ANALOG TRACE

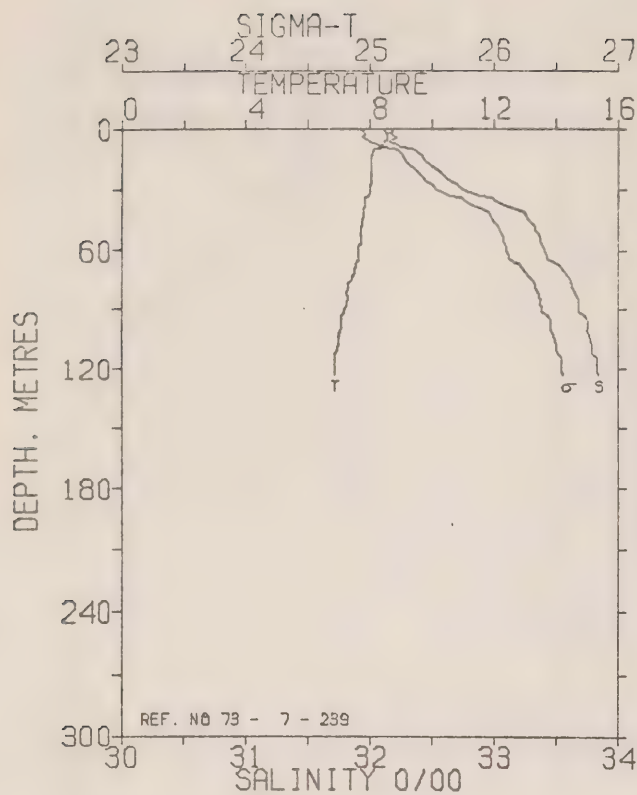
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.65	31.58	24.52	342.0	0.0	0.0	1481.
10	8.33	31.77	24.72	323.8	0.33	0.02	1480.
20	8.20	31.88	24.82	314.1	0.65	0.07	1480.
30	8.17	31.92	24.86	311.1	0.96	0.14	1480.
50	8.01	32.16	25.07	291.4	1.56	0.39	1480.
75	8.00	32.25	25.14	284.7	2.25	0.85	1481.
100	7.56	32.96	25.76	226.0	2.93	1.42	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.65	31.58	24.52	65.	8.01	32.16	25.07
5.	8.35	31.71	24.67	70.	8.01	32.18	25.09
10.	8.33	31.77	24.72	75.	8.00	32.25	25.14
15.	8.24	31.84	24.79	80.	7.94	32.26	25.24
20.	8.20	31.88	24.82	85.	7.92	32.49	25.34
25.	8.18	31.90	24.84	90.	7.72	32.75	25.58
30.	8.17	31.92	24.86	95.	7.62	32.85	25.67
35.	8.13	31.96	24.89	100.	7.56	32.56	25.76
40.	8.09	32.03	24.95	105.	7.49	33.04	25.83
45.	8.03	32.15	25.06	110.	7.36	33.23	26.00
50.	8.01	32.16	25.07	115.	7.25	33.44	26.18
55.	8.01	32.17	25.07	120.	7.20	33.48	26.22

REFERENCE NO. 73- 7-238 STN- JF12 DATE 13/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 23.2  
 RESULTS OF STD CAST 65 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.87	31.90	24.74	321.4	0.0	0.0	1482.
10	8.26	32.03	24.93	303.6	0.31	0.02	1480.
20	8.16	32.20	25.08	285.9	0.61	0.06	1480.
30	8.04	32.58	25.39	260.0	0.88	0.13	1480.
50	7.99	32.79	25.56	244.2	1.39	0.24	1481.
75	7.53	33.35	26.07	156.1	1.95	0.69	1480.
100	6.71	33.85	26.58	148.5	2.37	1.06	1478.
125	6.69	33.87	26.59	147.3	2.74	1.49	1478.
150	6.69	33.87	26.60	147.2	3.11	2.00	1479.
175	6.69	33.87	26.60	147.9	3.48	2.61	1479.

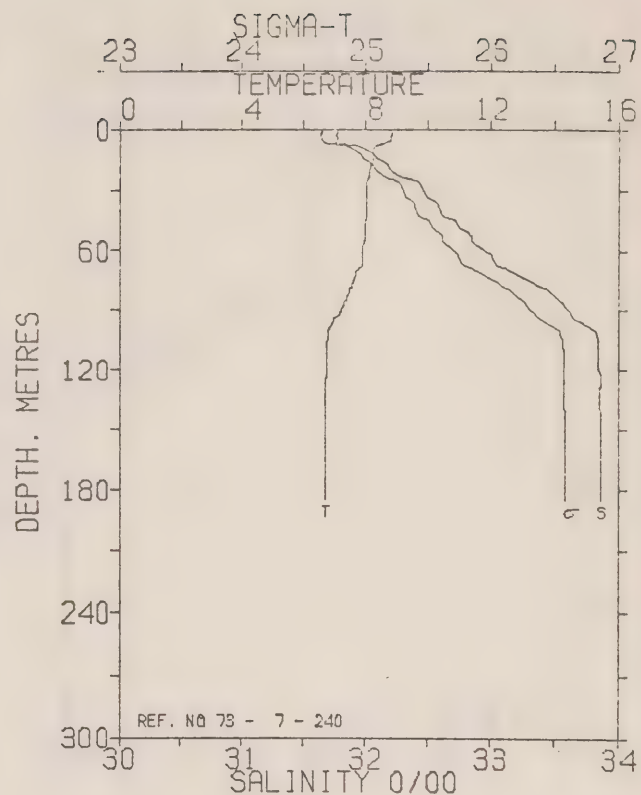
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.87	31.90	24.74	70.	7.72	33.24	25.96
5.	8.66	31.97	24.83	75.	7.53	33.25	26.07
10.	8.26	32.03	24.93	80.	7.41	33.48	26.19
15.	8.17	32.15	25.03	85.	7.20	33.65	26.35
20.	8.16	32.20	25.08	90.	7.06	33.70	26.41
25.	8.09	32.31	25.18	95.	6.81	33.83	26.55
30.	8.04	32.58	25.39	100.	6.71	33.85	26.58
35.	8.04	32.62	25.43	105.	6.70	33.87	26.59
40.	8.03	32.66	25.46	110.	6.70	33.87	26.59
45.	8.04	32.74	25.52	115.	6.69	33.87	26.59
50.	7.99	32.79	25.56	120.	6.69	33.83	26.56
55.	7.96	32.87	25.63	125.	6.65	33.88	26.60
60.	7.95	32.90	25.66	130.	6.69	33.88	26.60
65.	7.83	33.13	25.86	135.	6.69	33.88	26.60



REFERENCE NO. 73- 7-239 STN- JF11 DATE 13/ 4/73  
 POSITION 48-14.6N, 124- 5.0W PST 23.7  
 RESULTS OF STD CAST 79 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.66	32.10	24.93	303.4	0.0	0.0	1482.
10	8.11	32.34	25.20	278.3	0.30	0.01	1480.
20	8.06	32.54	25.36	263.1	0.57	0.06	1480.
30	7.99	32.74	25.53	247.4	0.82	0.12	1480.
50	7.69	33.34	26.04	199.1	1.25	0.30	1480.
75	7.33	33.61	26.31	174.0	1.73	0.59	1480.
100	7.04	33.75	26.45	160.3	2.14	0.57	1479.

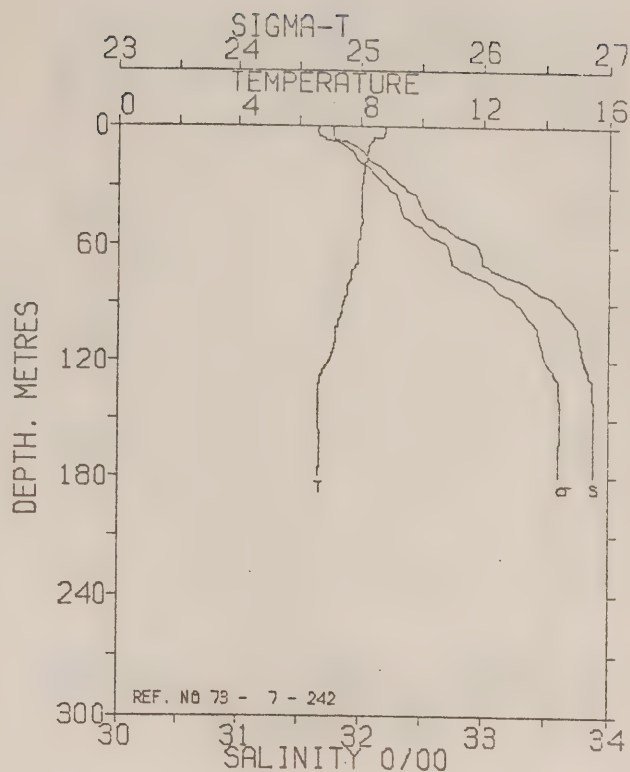
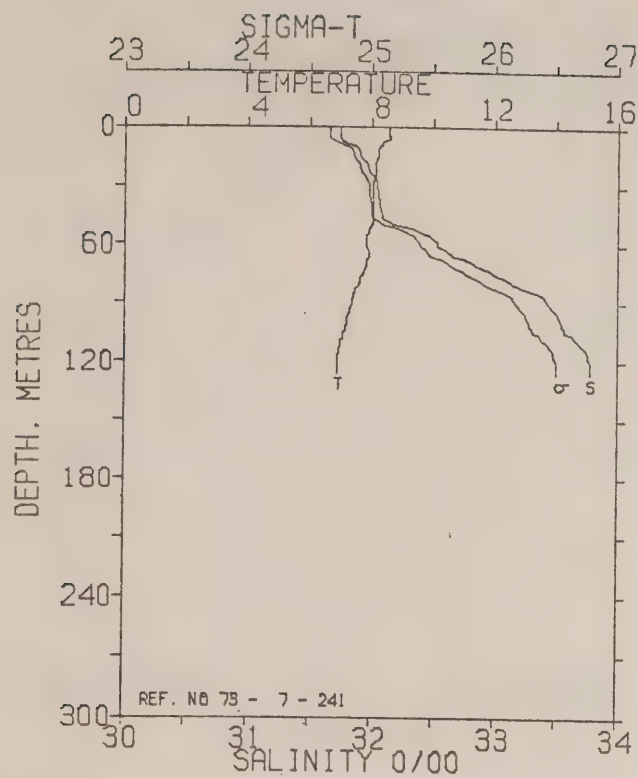
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.66	32.10	24.93	65.	7.57	33.46	26.15
5.	8.66	32.14	24.96	70.	7.47	33.55	26.24
10.	8.11	32.34	25.20	75.	7.33	33.61	26.31
15.	8.06	32.43	25.27	80.	7.26	33.64	26.34
20.	8.06	32.54	25.36	85.	7.26	33.68	26.37
25.	8.03	32.63	25.43	90.	7.16	33.68	26.38
30.	7.99	32.74	25.53	95.	7.07	33.74	26.44
35.	7.83	33.00	25.75	100.	7.04	33.75	26.45
40.	7.77	33.20	25.92	105.	6.96	33.78	26.49
45.	7.73	33.28	25.95	110.	6.91	33.79	26.50
50.	7.69	33.34	26.04	115.	6.85	33.83	26.54
55.	7.67	33.38	26.07	120.	6.83	33.83	26.54



REFERENCE NO. 73- 7-240 STN- JF12 DATE 14/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 0.1  
 RESULTS OF STD CAST 84 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.81	31.77	24.65	330.1	0.0	0.0	1482.
10	8.26	32.00	24.91	305.8	0.32	0.02	1480.
20	8.14	32.20	25.08	289.4	0.62	0.06	1480.
30	8.05	32.47	25.31	268.3	0.90	0.13	1480.
50	7.97	32.79	25.57	243.9	1.41	0.34	1481.
75	7.61	33.21	26.03	200.3	1.98	0.70	1480.
100	6.80	33.82	26.54	151.9	2.42	1.09	1478.
125	6.73	33.86	26.58	148.6	2.80	1.52	1479.
150	6.71	33.86	26.59	148.2	3.17	2.04	1479.
175	6.70	33.86	26.59	148.7	3.54	2.66	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.81	31.77	24.65	85.	7.33	33.54	26.25
5.	8.81	31.77	24.65	90.	7.21	33.61	26.32
10.	8.26	32.00	24.91	95.	6.99	33.69	26.41
15.	8.23	32.11	25.00	100.	6.80	33.82	26.54
20.	8.14	32.20	25.08	105.	6.79	33.84	26.56
25.	8.06	32.40	25.25	110.	6.74	33.85	26.57
30.	8.05	32.47	25.31	115.	6.74	33.85	26.57
35.	8.04	32.55	25.37	120.	6.74	33.86	26.57
40.	8.04	32.59	25.40	125.	6.73	33.86	26.58
45.	8.01	32.72	25.51	130.	6.72	33.86	26.58
50.	7.97	32.79	25.57	135.	6.72	33.86	26.58
55.	7.95	32.86	25.62	140.	6.71	33.87	26.59
60.	7.92	32.96	25.70	145.	6.72	33.86	26.59
65.	7.92	33.02	25.75	150.	6.73	33.86	26.59
70.	7.72	33.13	25.87	155.	6.70	33.86	26.59
75.	7.61	33.31	26.03	160.	6.70	33.86	26.59
80.	7.47	33.45	26.16	165.	6.70	33.86	26.59



REFERENCE NO. 73-7-241 STN- JF13 DATE 14/ 4/73  
 POSITION 48-21.6N, 124- 0.7W PST 0.7  
 RESULTS OF STD CAST 73 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA σ	POT EN	SOUND VEL
0	8.57	31.74	24.66	328.9	0.0	0.0	1481.
10	8.25	31.86	24.80	316.0	0.33	0.02	1480.
20	8.12	31.97	24.90	306.6	0.64	0.06	1480.
30	8.04	32.04	24.97	299.9	0.94	0.14	1480.
50	7.98	32.18	25.09	289.5	1.54	0.38	1480.
75	7.68	32.97	25.75	226.4	2.18	0.79	1480.
100	7.17	33.54	26.27	177.6	2.67	1.22	1479.
125	6.87	33.78	26.50	156.4	3.08	1.69	1479.

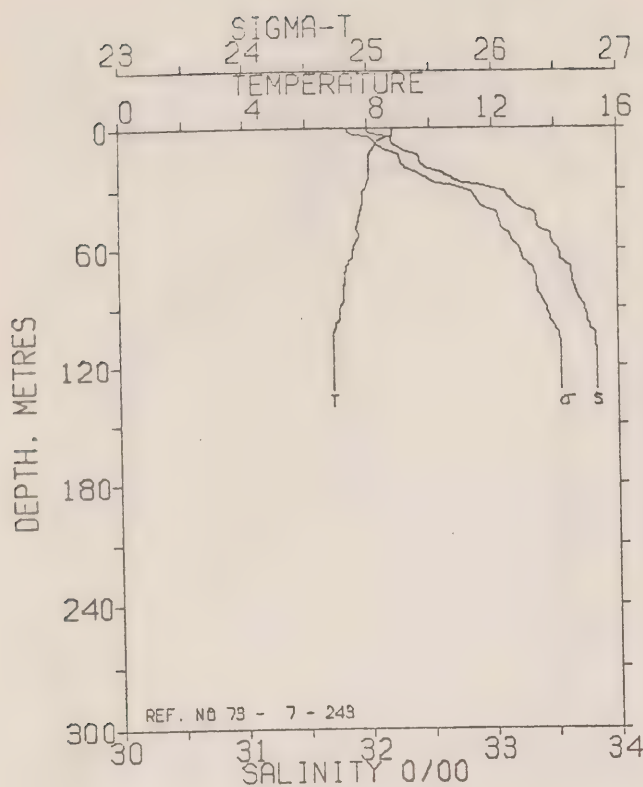
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.57	31.74	24.66	65.	7.90	32.64	25.46
5.	8.57	31.74	24.66	70.	7.82	32.82	25.61
10.	8.25	31.86	24.80	75.	7.68	32.97	25.75
15.	8.16	31.91	24.85	80.	7.56	33.13	25.90
20.	8.12	31.97	24.90	85.	7.43	33.26	26.09
25.	8.09	32.01	24.94	90.	7.31	33.43	26.16
30.	8.04	32.04	24.97	95.	7.22	33.51	26.24
35.	8.03	32.05	24.98	100.	7.17	33.54	26.27
40.	8.02	32.07	24.99	105.	7.07	33.57	26.31
45.	8.02	32.08	25.00	110.	6.98	33.69	26.41
50.	7.98	32.18	25.09	115.	6.91	33.76	26.48
55.	7.83	32.44	25.31	120.	6.88	33.78	26.50
60.	7.84	32.53	25.38	125.	6.87	33.78	26.50

REFERENCE NO. 73-7-242 STN- JF12 DATE 14/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 1.4  
 RESULTS OF STD CAST 89 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA σ	POT EN	SOUND VEL
0	8.80	31.77	24.65	330.0	0.0	0.0	1482.
10	8.25	31.94	24.86	310.1	0.32	0.02	1480.
20	8.11	32.16	25.06	291.9	0.63	0.06	1480.
30	8.05	32.36	25.22	276.5	0.91	0.13	1480.
50	8.02	32.64	25.44	255.4	1.44	0.35	1481.
75	7.69	33.16	25.90	212.4	2.03	0.72	1481.
100	7.28	33.72	26.40	165.6	2.49	1.13	1480.
125	6.78	33.84	26.56	150.6	2.88	1.58	1479.
150	6.65	33.88	26.61	146.0	3.25	2.10	1479.
175	6.65	33.88	26.61	146.5	3.62	2.70	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.80	31.77	24.65	80.	7.56	33.36	26.07
5.	8.72	31.77	24.66	85.	7.58	33.48	26.16
10.	8.25	31.94	24.86	90.	7.43	33.59	26.27
15.	8.19	32.05	24.95	95.	7.35	33.66	26.34
20.	8.11	32.16	25.06	100.	7.28	33.72	26.40
25.	8.09	32.25	25.13	105.	7.21	33.76	26.44
30.	8.05	32.36	25.22	110.	7.16	33.77	26.46
35.	8.03	32.46	25.30	115.	7.07	33.79	26.48
40.	8.04	32.49	25.32	120.	6.97	33.60	26.50
45.	8.05	32.53	25.35	125.	6.78	33.84	26.56
50.	8.02	32.64	25.44	130.	6.66	33.88	26.60
55.	7.98	32.78	25.56	135.	6.65	33.89	26.60
60.	7.93	32.96	25.70	140.	6.65	33.88	26.61
65.	7.91	32.98	25.72	145.	6.65	33.88	26.61
70.	7.86	32.99	25.74	150.	6.66	33.88	26.61

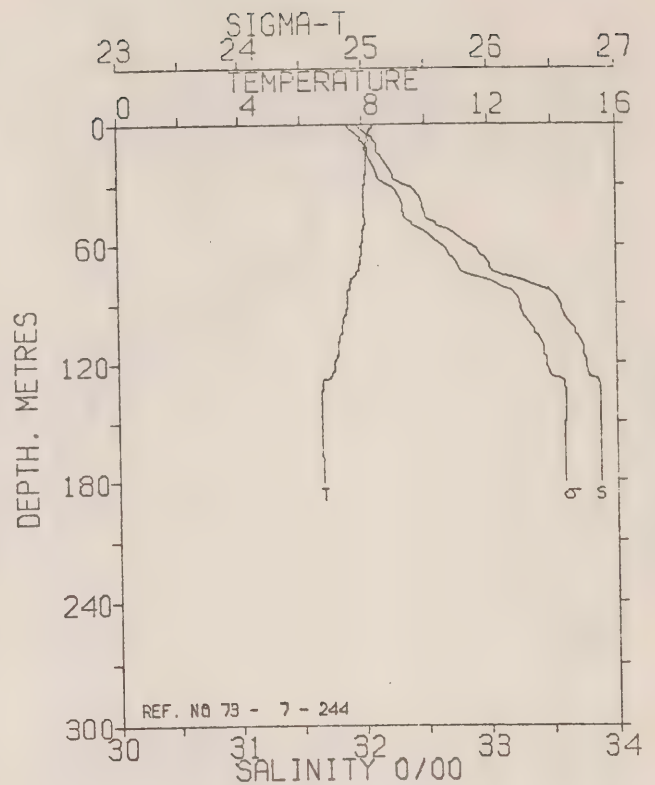




REFERENCE NO. 73- 7-243 STN- JF11 DATE 14/ 4/73  
 POSITION 48-14.6N, 124- 5.0W PST 2.2  
 RESULTS OF STD CAST 75 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.80	32.00	24.83	313.0	0.0	0.0	1482.
10	8.17	32.25	25.12	285.8	0.30	0.01	1480.
20	8.05	32.49	25.32	266.6	0.57	0.06	1480.
30	7.86	33.05	25.79	222.5	0.82	0.12	1480.
50	7.62	33.39	26.09	194.4	1.23	0.29	1480.
75	7.22	33.64	26.34	170.2	1.68	0.57	1479.
100	6.89	33.78	26.50	156.0	2.09	0.94	1479.
125	6.82	33.83	26.54	152.0	2.47	1.37	1479.

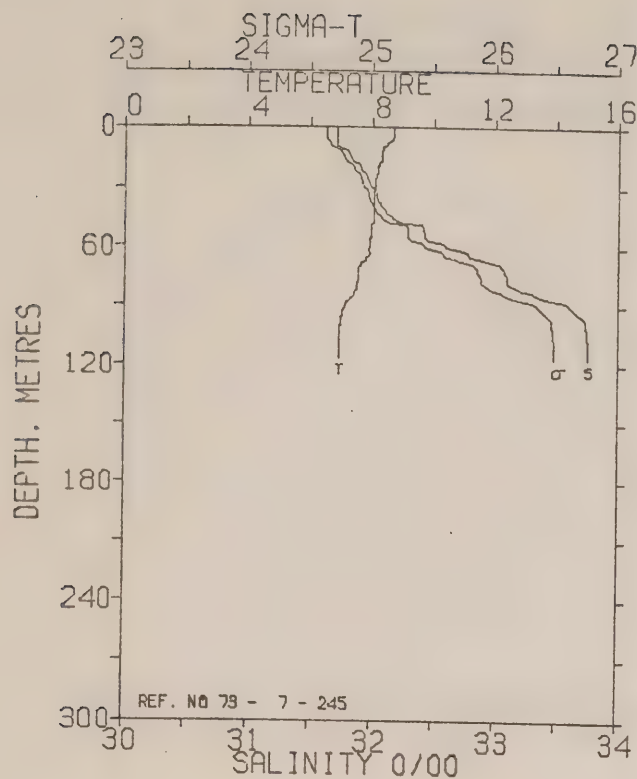
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.80	32.00	24.83	65.	7.36	33.54	26.25
5.	8.41	32.19	25.04	70.	7.25	33.63	26.33
10.	8.17	32.25	25.12	75.	7.22	33.64	26.34
15.	8.04	32.41	25.26	80.	7.20	33.66	26.36
20.	8.05	32.49	25.32	85.	7.15	33.69	26.39
25.	8.02	32.68	25.47	90.	7.08	33.74	26.44
30.	7.86	33.05	25.79	95.	7.05	33.75	26.45
35.	7.80	33.15	25.87	100.	6.89	33.78	26.50
40.	7.76	33.27	25.98	105.	6.85	33.82	26.53
45.	7.66	33.35	26.05	110.	6.82	33.82	26.54
50.	7.62	33.39	26.09	115.	6.82	33.83	26.54
55.	7.61	33.47	26.15	120.	6.82	33.83	26.54



REFERENCE NO. 73- 7-244 STN- JF12 DATE 14/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 2.7  
 RESULTS OF STD CAST 87 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.31	31.95	24.86	305.7	0.0	0.0	1480.
10	8.12	32.11	25.02	295.6	0.30	0.02	1480.
20	8.10	32.19	25.08	289.6	0.60	0.06	1480.
30	8.06	32.34	25.20	278.1	0.88	0.13	1480.
50	8.07	32.59	25.39	260.2	1.42	0.35	1481.
75	7.72	32.09	25.84	218.0	2.01	0.73	1481.
100	7.33	33.64	26.33	172.3	2.47	1.14	1480.
125	7.00	33.78	26.48	158.1	2.88	1.61	1479.
150	6.65	33.87	26.60	146.7	3.25	2.12	1479.
175	6.65	33.87	26.60	147.3	3.62	2.73	1479.

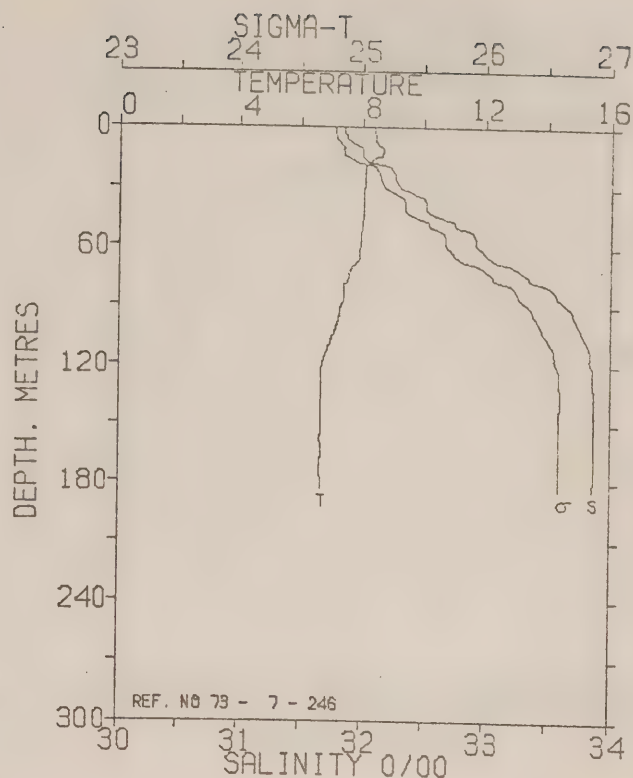
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.31	31.95	24.86	80.	7.55	33.35	26.07
5.	8.17	32.04	24.95	85.	7.48	33.52	26.21
10.	8.12	32.11	25.02	90.	7.46	33.57	26.25
15.	8.10	32.14	25.04	95.	7.41	33.59	26.28
20.	8.10	32.19	25.08	100.	7.33	33.64	26.37
25.	8.09	32.24	25.12	105.	7.27	33.68	26.33
30.	8.06	32.34	25.20	110.	7.17	33.73	26.42
35.	8.04	32.44	25.29	115.	7.15	33.75	26.44
40.	8.04	32.48	25.31	120.	7.08	33.77	26.46
45.	8.05	32.50	25.33	125.	7.00	33.78	26.48
50.	8.07	32.59	25.39	130.	6.67	33.87	26.60
55.	7.99	32.75	25.53	135.	6.65	33.88	26.60
60.	7.95	32.86	25.63	140.	6.65	33.88	26.60
65.	7.94	32.93	25.69	145.	6.65	33.87	26.60
70.	7.86	33.00	25.75	150.	6.65	33.87	26.60



REFERENCE NO. 73-7-245 STN- JF13 DATE 14/ 4/73  
 POSITION 48-21.6N, 124- 0.7W PST 3.3  
 RESULTS OF STD CAST 64 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.67	31.71	24.62	332.6	0.0	0.0	1481.
10	8.33	31.71	24.67	328.3	0.33	0.02	1480.
20	8.15	31.90	24.85	311.9	0.65	0.07	1480.
30	8.06	31.99	24.93	304.2	0.96	0.14	1480.
50	7.95	32.42	25.28	271.2	1.55	0.38	1480.
75	7.51	33.09	25.87	215.1	2.16	0.77	1480.
100	6.92	33.74	26.46	159.4	2.62	1.18	1479.

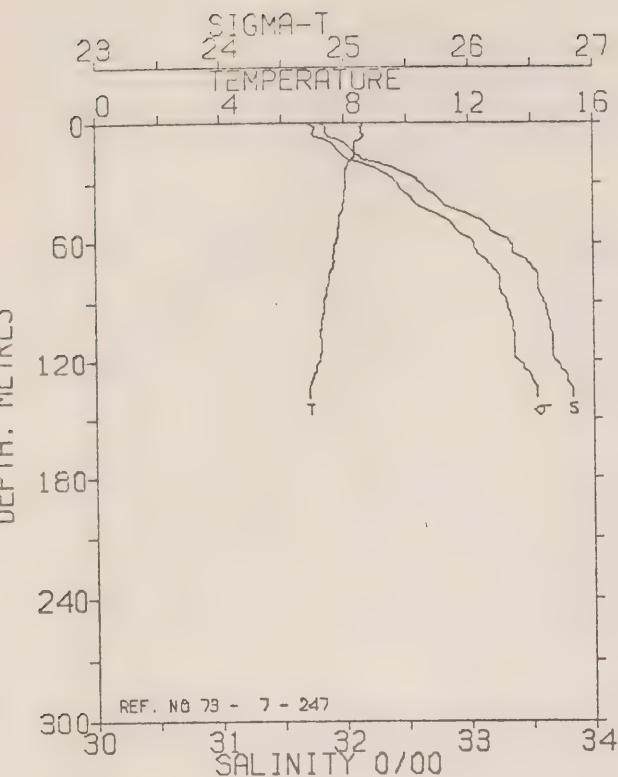
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.67	31.71	24.62	60.	7.91	32.60	25.42
5.	8.66	31.71	24.62	65.	7.77	32.78	25.59
10.	8.33	31.71	24.67	70.	7.55	33.04	25.82
15.	8.27	31.82	24.76	75.	7.51	33.09	25.87
20.	8.15	31.90	24.85	80.	7.48	33.15	25.92
25.	8.07	31.95	24.90	85.	7.35	33.26	26.11
30.	8.06	31.99	24.93	90.	7.07	33.62	26.34
35.	8.04	32.03	24.97	95.	6.96	33.71	26.43
40.	8.03	32.08	25.00	100.	6.92	33.74	26.46
45.	8.02	32.16	25.07	105.	6.92	33.75	26.47
50.	7.95	32.42	25.28	110.	6.92	33.76	26.48



REFERENCE NO. 73-7-246 STN- JF12 DATE 14/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 3.9  
 RESULTS OF STD CAST 100 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.38	31.85	24.78	318.0	0.0	0.0	1480.
10	8.58	31.98	24.85	311.7	0.32	0.02	1481.
20	8.08	32.22	25.11	286.9	0.62	0.06	1480.
30	8.07	32.31	25.18	280.4	0.91	0.13	1480.
50	7.98	32.77	25.55	245.5	1.43	0.35	1481.
75	7.56	33.35	26.07	196.5	1.99	0.70	1480.
100	7.15	33.76	26.45	160.9	2.43	1.09	1480.
125	6.67	33.87	26.60	147.1	2.81	1.53	1478.
150	6.66	33.87	26.60	146.8	3.17	2.04	1479.
175	6.65	33.87	26.60	147.2	3.54	2.65	1479.

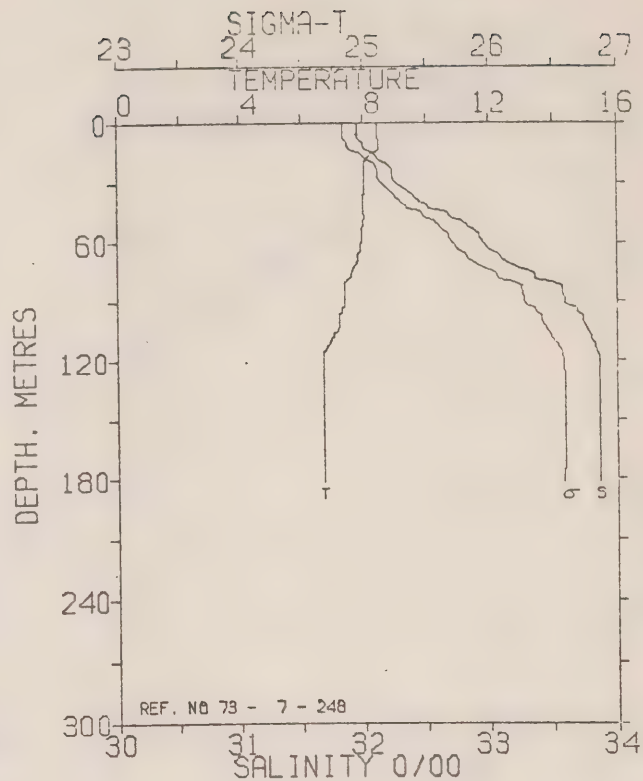
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.38	31.85	24.78	95.	7.23	33.71	26.40
5.	8.41	31.87	24.79	100.	7.15	33.76	26.45
10.	8.58	31.98	24.85	105.	7.02	33.79	26.49
15.	8.40	31.99	24.88	110.	6.87	33.83	26.54
20.	8.08	32.22	25.11	115.	6.79	33.84	26.56
25.	8.07	32.27	25.14	120.	6.68	33.85	26.58
30.	8.07	32.31	25.18	125.	6.67	33.87	26.60
35.	8.05	32.51	25.34	130.	6.66	33.87	26.60
40.	8.05	32.52	25.34	135.	6.66	33.88	26.60
45.	8.06	32.64	25.44	140.	6.66	33.88	26.60
50.	7.98	32.77	25.55	145.	6.66	33.87	26.60
55.	7.94	32.92	25.67	150.	6.67	33.87	26.60
60.	7.94	32.95	25.69	155.	6.65	33.87	26.60
65.	7.86	33.03	25.77	160.	6.65	33.87	26.60
70.	7.69	33.22	25.94	165.	6.65	33.87	26.60
75.	7.56	33.35	26.07	170.	6.64	33.87	26.60
80.	7.43	33.52	26.22	175.	6.65	33.87	26.60
85.	7.43	33.58	26.27	180.	6.66	33.87	26.60



REFERENCE NO. 73- 7-247 STN- JF11 DATE 14/ 4/73  
 POSITION 48-14.6N, 124- 5.0W PST 4.6  
 RESULTS OF STD CAST 82 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA	SVA	DELTA	POT EN	SOUND
m			T		D		VEL
0	8.58	31.81	24.71	324.2	0.0	0.0	1481.
10	8.36	31.99	24.89	307.9	0.32	0.02	1481.
20	8.13	32.28	25.15	283.3	0.62	0.06	1480.
30	8.02	32.62	25.43	256.7	0.89	0.13	1480.
50	7.81	33.12	25.85	216.5	1.37	0.32	1481.
75	7.50	33.54	26.23	181.5	1.86	0.64	1480.
100	7.23	33.65	26.34	170.6	2.30	1.03	1480.
129	7.04	33.75	26.45	160.9	2.72	1.51	1480.

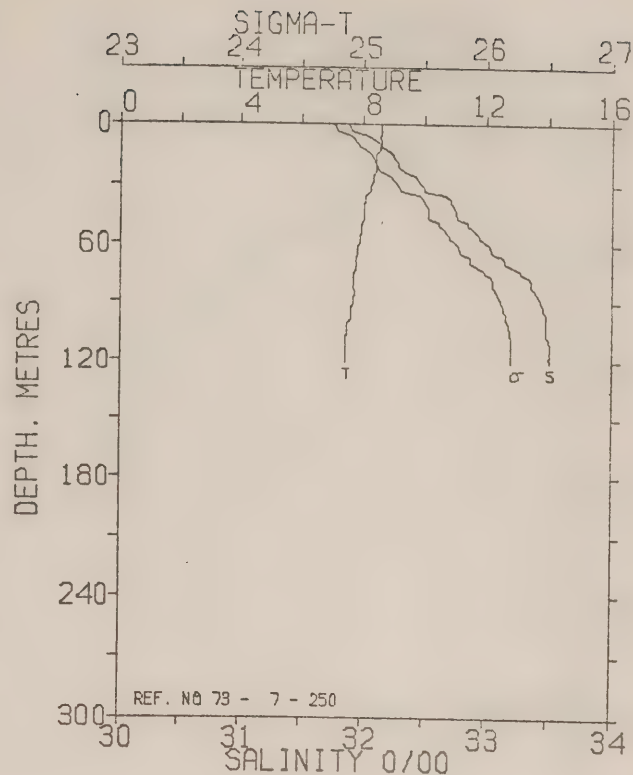
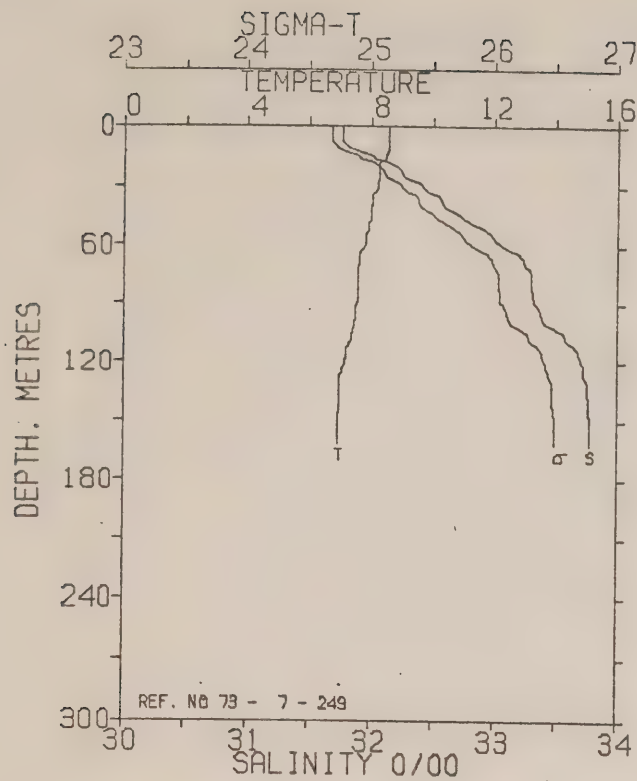
DEPTH	TEMP	SAL	SIGMA	DEPTH	TEMP	SAL	SIGMA
			T				T
0.	8.58	31.81	24.71	70.	7.62	33.47	26.15
5.	8.57	31.85	24.75	75.	7.50	33.54	26.23
10.	8.36	31.99	24.89	80.	7.43	33.55	26.24
15.	8.34	32.09	24.96	85.	7.39	33.56	26.26
20.	8.13	32.28	25.15	90.	7.30	33.60	26.30
25.	8.05	32.48	25.31	95.	7.27	33.63	26.33
30.	8.02	32.62	25.43	100.	7.23	33.65	26.34
35.	8.00	32.69	25.49	105.	7.20	33.66	26.36
40.	7.96	32.79	25.57	110.	7.22	33.67	26.36
45.	7.87	32.96	25.72	115.	7.21	33.67	26.37
50.	7.81	33.12	25.85	120.	7.15	33.69	26.39
55.	7.77	33.20	25.92	125.	7.04	33.75	26.45
60.	7.67	33.34	26.04	130.	6.91	33.79	26.50
65.	7.64	33.35	26.06	135.	6.84	33.83	26.54



REFERENCE NO. 73- 7-248 STN- JF12 DATE 14/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 5.2  
 RESULTS OF STD CAST 82 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA	SVA	DELTA	POT EN	SOUND
			T		D		VEL
0	8.48	31.95	24.84	312.0	0.0	0.0	1481.
10	8.50	31.99	24.87	309.9	0.31	0.02	1481.
20	8.02	32.18	25.08	289.2	0.61	0.06	1480.
30	8.02	32.26	25.15	283.4	0.90	0.13	1480.
50	7.97	32.80	25.57	243.1	1.43	0.35	1481.
75	7.61	33.33	26.05	196.7	1.95	0.71	1480.
100	7.22	33.74	26.42	163.4	2.44	1.10	1480.
125	6.69	33.86	26.59	147.7	2.82	1.54	1478.
150	6.68	33.86	26.59	147.8	3.15	2.06	1479.
175	6.69	33.86	26.59	148.6	3.56	2.67	1479.

DEPTH	TEMP	SAL	SIGMA	DEPTH	TEMP	SAL	SIGMA
			T				T
0.	8.48	31.95	24.84	75.	7.61	33.33	26.05
5.	8.48	31.94	24.83	80.	7.40	33.49	26.20
10.	8.50	31.99	24.87	85.	7.42	33.58	26.27
15.	8.25	32.08	24.97	90.	7.40	33.60	26.28
20.	8.02	32.18	25.08	95.	7.30	33.69	26.37
25.	8.02	32.23	25.12	100.	7.22	33.74	26.42
30.	8.02	32.26	25.15	105.	7.12	33.78	26.47
35.	8.01	32.38	25.24	110.	6.94	33.81	26.51
40.	8.01	32.45	25.29	115.	6.72	33.85	26.57
45.	8.01	32.67	25.47	120.	6.69	33.86	26.59
50.	7.97	32.80	25.57	125.	6.69	33.86	26.59
55.	7.95	32.90	25.66	130.	6.69	33.87	26.59
60.	7.93	32.96	25.70	135.	6.68	33.87	26.59
65.	7.83	33.06	25.80	140.	6.68	33.87	26.59
70.	7.75	33.13	25.87	145.	6.69	33.86	26.59



REFERENCE NO. 73- 7-249 STN- DATE 16/ 4/73  
 POSITION 48-16.0N, 124- 9.4W PST 18.0  
 RESULTS OF STD CAST 85 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.57	31.76	24.68	327.5	0.0	0.0	1481.
10	8.54	31.79	24.71	325.0	0.33	0.02	1481.
20	8.23	32.20	25.07	290.7	0.64	0.06	1480.
30	8.21	32.41	25.24	274.6	0.92	0.14	1481.
50	7.91	32.86	25.64	237.3	1.43	0.34	1481.
75	7.54	33.29	26.02	200.7	1.97	0.69	1480.
100	7.43	33.40	26.12	191.6	2.47	1.13	1480.
125	7.04	33.72	26.43	162.9	2.90	1.62	1480.
150	6.92	33.77	26.49	157.7	3.30	2.18	1480.

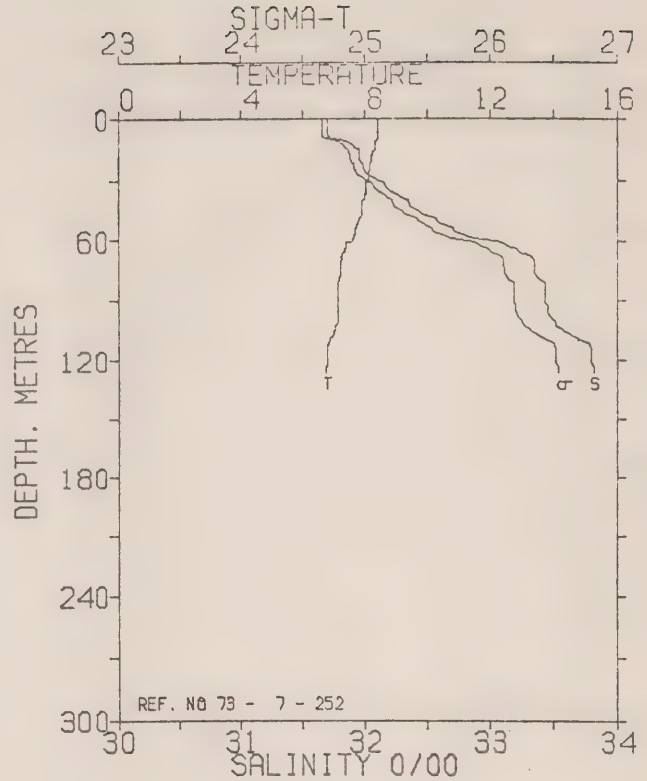
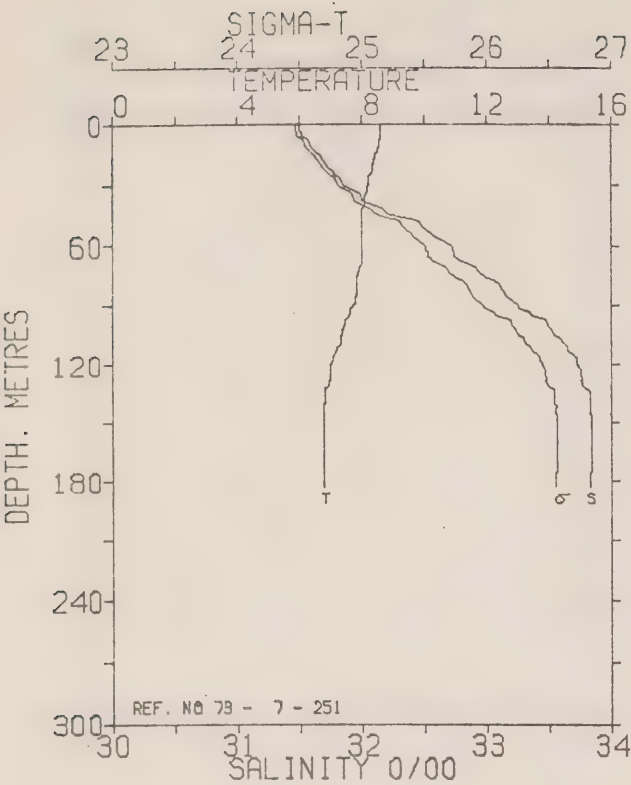
REFERENCE NO. 73- 7-250 STN- JF11 DATE 16/ 4/73  
 POSITION 48-14.6N, 124- 5.0W PST 19.7  
 RESULTS OF STD CAST 67 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.60	31.88	24.77	318.9	0.0	0.0	1481.
10	8.59	32.13	24.96	300.7	0.31	0.02	1482.
20	8.41	32.29	25.11	286.9	0.60	0.06	1481.
30	8.28	32.47	25.27	271.2	0.88	0.13	1481.
50	7.95	32.86	25.62	238.4	1.39	0.34	1481.
75	7.68	33.28	26.00	203.3	1.94	0.69	1481.
100	7.52	33.48	26.17	186.8	2.43	1.12	1481.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.57	31.76	24.68	85.	7.54	33.31	26.04
5.	8.56	31.76	24.68	90.	7.52	33.33	26.06
10.	8.54	31.79	24.71	95.	7.48	33.37	26.09
15.	8.45	32.01	24.89	100.	7.43	33.40	26.12
20.	8.23	32.20	25.07	105.	7.37	33.57	26.27
25.	8.23	32.27	25.12	110.	7.26	33.61	26.31
30.	8.21	32.41	25.24	115.	7.19	33.69	26.38
35.	8.02	32.55	25.37	120.	7.15	33.70	26.40
40.	8.01	32.58	25.40	125.	7.04	33.72	26.43
45.	7.99	32.72	25.51	130.	6.98	33.75	26.46
50.	7.91	32.86	25.64	135.	6.97	33.76	26.47
55.	7.84	32.98	25.73	140.	6.96	33.77	26.48
60.	7.75	33.06	25.81	145.	6.94	33.76	26.48
65.	7.59	33.20	25.95	150.	6.92	33.77	26.49
70.	7.57	33.24	25.98	155.	6.92	33.75	26.47
75.	7.54	33.29	26.02	160.	6.92	33.78	26.49

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.60	31.88	24.77	65.	7.82	33.06	25.80
5.	8.56	31.99	24.85	70.	7.76	33.14	25.88
10.	8.59	32.13	24.96	75.	7.68	33.28	26.00
15.	8.44	32.23	25.06	80.	7.70	33.36	26.05
20.	8.41	32.29	25.11	85.	7.72	33.40	26.08
25.	8.36	32.39	25.20	90.	7.68	33.44	26.12
30.	8.28	32.47	25.27	95.	7.63	33.48	26.16
35.	8.09	32.67	25.46	100.	7.52	33.48	26.17
40.	8.04	32.72	25.50	105.	7.46	33.48	26.18
45.	8.02	32.75	25.53	110.	7.44	33.50	26.20
50.	7.95	32.86	25.62	115.	7.43	33.51	26.21
55.	7.90	32.94	25.69	120.	7.43	33.51	26.21





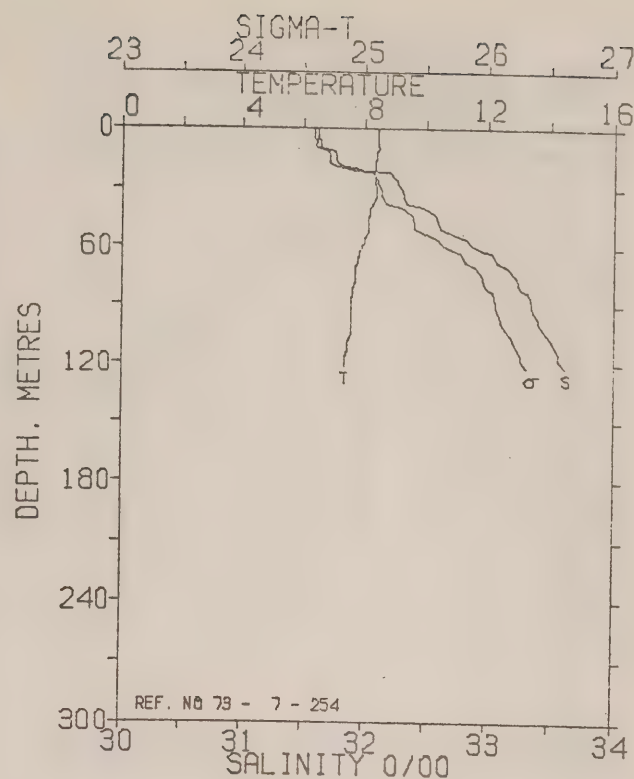
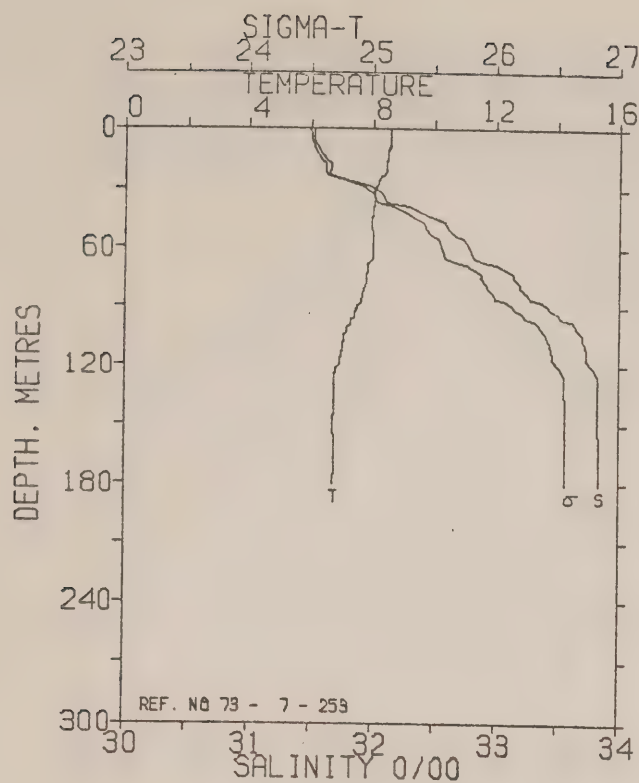
REFERENCE NO. 73- 7-251 STN- JF12 DATE 16/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 20.3  
 RESULTS OF STD CAST 85 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.60	31.49	24.46	348.4	0.0	0.0	1481.
10	8.53	31.58	24.54	340.8	0.35	0.02	1481.
20	8.35	31.71	24.67	328.8	0.68	0.07	1480.
30	8.18	31.85	24.80	316.1	1.00	0.15	1480.
50	7.98	32.47	25.32	267.4	1.59	0.39	1480.
75	7.85	32.98	25.74	228.1	2.21	0.78	1481.
100	7.39	33.49	26.20	184.3	2.73	1.24	1480.
125	6.96	33.76	26.47	158.7	3.15	1.73	1479.
150	6.77	33.84	26.56	151.0	3.54	2.26	1479.
175	6.77	33.83	26.56	151.6	3.91	2.89	1479.

REFERENCE NO. 73- 7-252 STN- JF13 DATE 16/ 4/73  
 POSITION 48-21.6N, 124- 0.7W PST 20.9  
 RESULTS OF STD CAST 78 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA C	POT EN	SOUND VEL
0	8.42	31.70	24.65	325.8	0.0	0.0	1480.
10	8.40	31.74	24.69	327.0	0.33	0.02	1480.
20	8.18	31.95	24.88	308.6	0.64	0.06	1480.
30	8.10	32.11	25.02	295.8	0.95	0.14	1480.
50	7.80	32.58	25.43	257.2	1.50	0.37	1480.
75	7.22	33.35	26.12	192.0	2.05	0.71	1479.
100	7.12	33.51	26.25	179.5	2.51	1.12	1479.
125	6.77	33.82	26.54	152.1	2.91	1.58	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.60	31.49	24.46	80.	7.81	33.11	25.84	65.	7.31	33.22	26.00
5.	8.59	31.51	24.48	85.	7.78	33.16	25.89	70.	7.24	33.34	26.11
10.	8.53	31.58	24.54	90.	7.71	33.25	25.97	75.	7.22	33.35	26.12
15.	8.44	31.65	24.61	95.	7.53	33.39	26.10	80.	7.19	33.40	26.16
20.	8.35	31.71	24.67	100.	7.39	33.49	26.20	85.	7.16	33.44	26.19
25.	8.23	31.79	24.75	105.	7.31	33.55	26.26	90.	7.16	33.44	26.19
30.	8.18	31.85	24.80	110.	7.25	33.63	26.33	95.	7.15	33.46	26.21
35.	8.09	31.99	24.92	115.	7.08	33.71	26.42	100.	7.12	33.51	26.25
40.	8.04	32.08	25.00	120.	6.98	33.73	26.44	105.	7.02	33.59	26.33
45.	8.01	32.26	25.15	125.	6.96	33.76	26.47	110.	6.87	33.73	26.46
50.	7.98	32.47	25.32	130.	6.90	33.77	26.49	115.	6.79	33.80	26.53
55.	7.96	32.58	25.40	135.	6.80	33.83	26.55	120.	6.79	33.80	26.52
60.	7.98	32.73	25.52	140.	6.78	33.83	26.55	125.	6.77	33.82	26.54
65.	7.98	32.73	25.52	145.	6.77	33.84	26.56				
70.	7.94	32.86	25.63	150.	6.77	33.85	26.57				



REFERENCE NO. 73- 7-253 STN- JF12 DATE 16/ 4/73  
POSITION 48-17.2N, 124- 3.4W PST 21.5  
RESULTS OF STD CAST 77 POINTS TAKEN FROM ANALOG TRACE

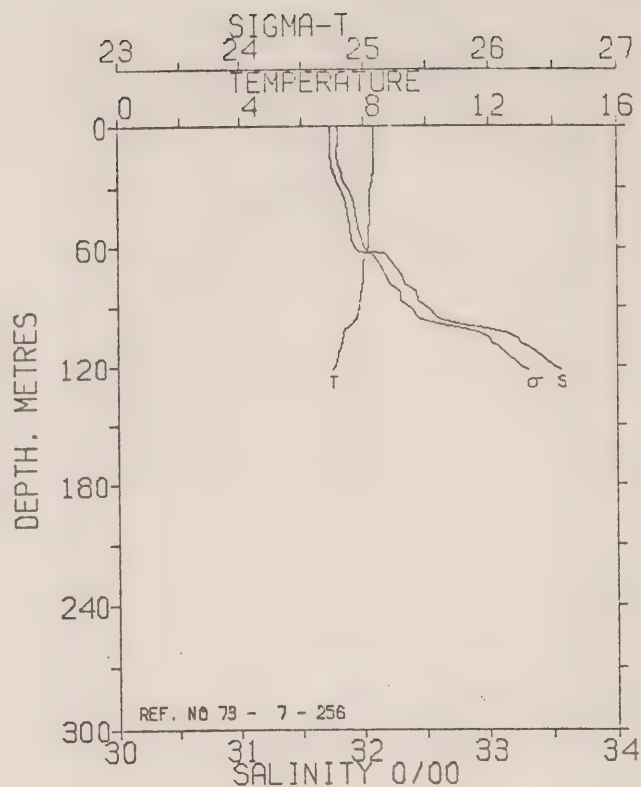
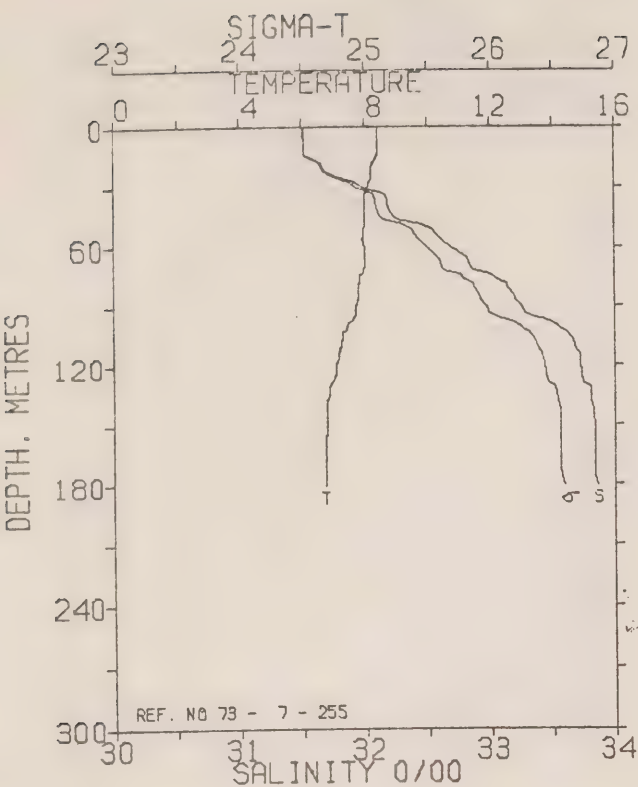
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	8.55	31.51	24.48	345.7	0.0	0.0	1480.
10	8.50	31.55	24.52	342.6	0.34	0.02	1481.
20	8.41	31.65	24.61	334.1	0.68	0.07	1480.
30	8.08	32.01	24.94	303.0	1.00	0.15	1480.
50	7.95	32.61	25.43	256.7	1.56	0.38	1480.
75	7.75	33.14	25.88	214.7	2.16	0.76	1481.
100	7.20	33.65	26.35	170.2	2.65	1.19	1480.
125	6.77	33.83	26.55	151.3	3.05	1.65	1479.
150	6.73	33.84	26.56	150.5	3.43	2.18	1479.
175	6.73	33.84	26.57	150.5	3.80	2.80	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.55	31.51	24.48	80.	7.73	33.19	25.92
5.	8.55	31.52	24.49	85.	7.66	33.27	25.99
10.	8.50	31.55	24.52	90.	7.46	33.43	26.14
15.	8.43	31.61	24.58	95.	7.33	33.52	26.23
20.	8.41	31.65	24.61	100.	7.20	33.65	26.35
25.	8.19	31.73	24.71	105.	7.05	33.70	26.41
30.	8.08	32.01	24.94	110.	7.01	33.73	26.44
35.	8.04	32.09	25.01	115.	6.95	33.74	26.46
40.	7.99	32.32	25.20	120.	6.87	33.78	26.50
45.	7.94	32.50	25.35	125.	6.77	33.83	26.55
50.	7.95	32.61	25.43	130.	6.74	33.83	26.55
55.	7.98	32.74	25.52	135.	6.74	33.83	26.56
60.	7.98	32.78	25.56	140.	6.74	33.84	26.56
65.	7.97	32.81	25.59	145.	6.73	33.83	26.56
70.	7.82	33.02	25.77	150.	6.73	33.84	26.56
75.	7.75	33.14	25.88	155.	6.74	33.84	26.57

REFERENCE NO. 73- 7-254 STN- JF11 DATE 16/ 4/73  
POSITION 48-14.6N, 124- 5.0W PST 22.1  
RESULTS OF STD CAST 57 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	8.42	31.61	24.58	336.5	0.0	0.0	1480.
10	8.45	31.64	24.60	335.2	0.34	0.02	1480.
20	8.31	31.92	24.84	312.7	0.66	0.07	1480.
30	8.36	32.30	25.12	285.6	0.95	0.14	1481.
50	8.13	32.61	25.41	259.1	1.50	0.26	1481.
75	7.67	33.22	25.95	207.7	2.07	0.72	1481.
100	7.56	33.42	26.12	191.9	2.57	1.17	1481.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.42	31.61	24.58	65.	7.79	33.05	25.80
5.	8.42	31.61	24.58	70.	7.70	33.15	25.89
10.	8.45	31.64	24.60	75.	7.67	33.22	25.95
15.	8.36	31.76	24.71	80.	7.65	33.25	25.98
20.	8.31	31.92	24.84	85.	7.59	33.34	26.05
25.	8.33	32.25	25.09	90.	7.58	33.35	26.07
30.	8.36	32.30	25.12	95.	7.58	33.39	26.10
35.	8.35	32.32	25.14	100.	7.56	33.42	26.12
40.	8.20	32.48	25.29	105.	7.49	33.48	26.17
45.	8.13	32.55	25.39	110.	7.43	33.53	26.22
50.	8.13	32.61	25.41	115.	7.38	33.56	26.26
55.	7.98	32.80	25.57	120.	7.33	33.59	26.29



REFERENCE NO. 73- 7-255 STN- JF12 DATE 16/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 22.5  
 RESULTS OF STD CAST 63 POINTS TAKEN FROM ANALOG TRACE

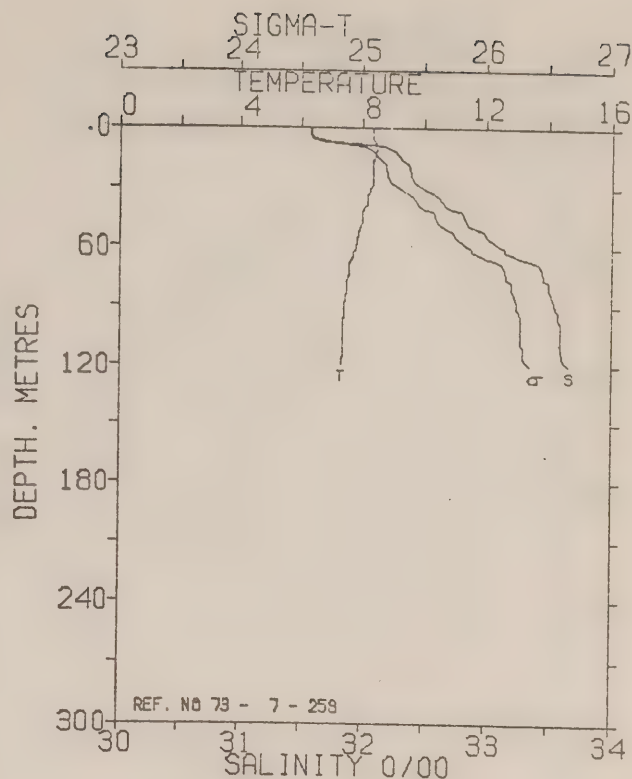
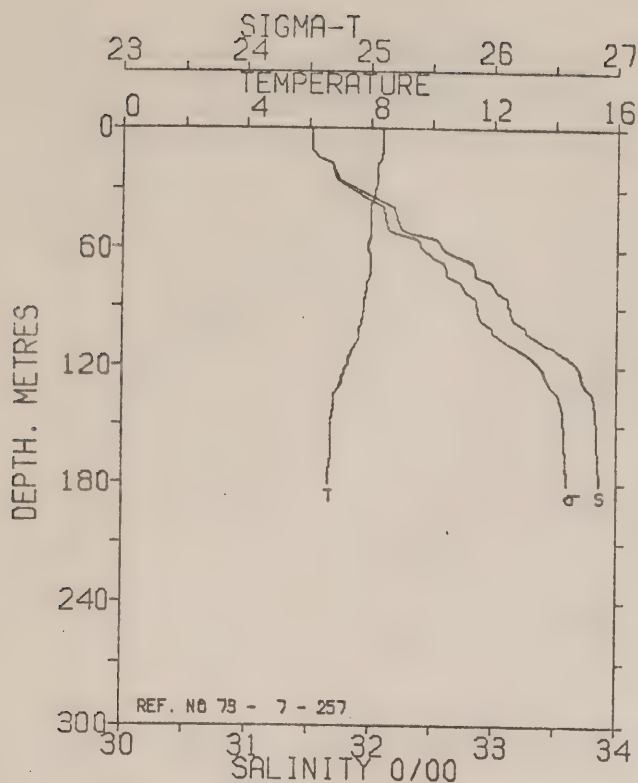
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA C	POT EN	SOUND VEL
0	8.40	31.51	24.51	343.7	0.0	0.0	1480.
10	8.40	31.52	24.51	343.6	0.34	0.02	1480.
20	8.22	31.67	24.65	330.3	0.68	0.07	1480.
30	8.10	31.98	24.92	305.2	1.00	0.15	1480.
50	7.96	32.49	25.34	265.7	1.58	0.38	1480.
75	7.82	33.03	25.78	224.1	2.19	0.78	1481.
100	7.39	33.54	26.24	180.8	2.71	1.23	1480.
125	7.02	33.74	26.45	161.3	3.13	1.71	1480.
150	6.74	33.84	26.56	150.4	3.51	2.25	1479.
175	6.70	33.84	26.57	150.2	3.89	2.87	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.40	31.51	24.51	90.	7.70	33.26	25.98
5.	8.40	31.51	24.51	95.	7.60	33.35	26.06
10.	8.42	31.52	24.51	100.	7.39	33.54	26.24
15.	8.34	31.55	24.55	105.	7.26	33.64	26.34
20.	8.22	31.67	24.65	110.	7.20	33.68	26.37
25.	8.18	31.79	24.76	115.	7.10	33.72	26.42
30.	8.10	31.98	24.92	120.	7.03	33.73	26.44
35.	8.01	32.17	25.08	125.	7.02	33.74	26.45
40.	8.00	32.18	25.09	130.	6.84	33.79	26.51
45.	8.00	32.24	25.13	135.	6.79	33.81	26.54
50.	7.96	32.49	25.34	140.	6.76	33.83	26.55
55.	7.94	32.59	25.42	145.	6.75	33.83	26.56
60.	7.97	32.70	25.49	150.	6.74	33.84	26.56
65.	7.97	32.81	25.59	155.	6.73	33.84	26.57
70.	7.96	32.84	25.61	160.	6.72	33.84	26.57
75.	7.82	33.03	25.78	165.	6.80	33.84	26.56
80.	7.77	33.14	25.87	170.	6.74	33.82	26.55

REFERENCE NO. 73- 7-256 STN- JF13 DATE 16/ 4/73  
 POSITION 48-21.6N, 124- 0.7W PST 23.0  
 RESULTS OF STD CAST 38 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA C	POT EN	SOUND VEL
0	8.34	31.78	24.73	322.8	0.0	0.0	1480.
10	8.34	31.78	24.73	322.9	0.32	0.02	1480.
20	8.33	31.81	24.75	321.5	0.65	0.07	1480.
30	8.23	31.87	24.81	315.7	0.96	0.15	1480.
50	8.17	31.96	24.89	308.2	1.55	0.40	1460.
75	7.96	32.31	25.20	279.4	2.32	0.87	1481.
100	7.47	32.92	25.74	227.8	2.95	1.46	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.34	31.78	24.73	65.	8.02	32.19	25.09
5.	8.34	31.79	24.73	70.	7.98	32.26	25.15
10.	8.34	31.77	24.71	75.	7.96	32.31	25.20
15.	8.37	31.78	24.72	80.	7.92	32.38	25.25
20.	8.34	31.83	24.76	85.	7.88	32.43	25.30
25.	8.29	31.83	24.77	90.	7.83	32.51	25.37
30.	8.23	31.87	24.81	95.	7.76	32.59	25.44
35.	8.20	31.91	24.84	100.	7.47	32.52	25.74
40.	8.19	31.93	24.87	105.	7.31	33.22	26.00
45.	8.19	31.94	24.87	110.	7.23	33.31	26.08
50.	8.17	31.96	24.89	115.	7.16	33.41	26.17
55.	8.17	31.98	24.91	120.	7.08	33.51	26.26



REFERENCE NO. 73- 7-257 STN- JF12 DATE 16/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 23.5  
 RESULTS OF STD CAST 58 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.37	31.52	24.52	342.5	0.0	0.0	1480.
10	8.37	31.52	24.52	343.0	0.34	0.02	1480.
20	8.19	31.70	24.68	327.3	0.68	0.07	1480.
30	8.13	31.89	24.84	312.7	1.00	0.15	1480.
50	7.97	32.25	25.14	284.1	1.59	0.29	1480.
75	7.95	32.88	25.64	236.8	2.22	0.79	1481.
100	7.63	33.25	25.98	205.4	2.77	1.28	1481.
125	7.08	33.71	26.42	163.8	3.23	1.80	1480.
150	6.71	33.84	26.57	150.0	3.61	2.34	1479.
175	6.64	33.86	26.59	148.0	3.68	2.96	1479.

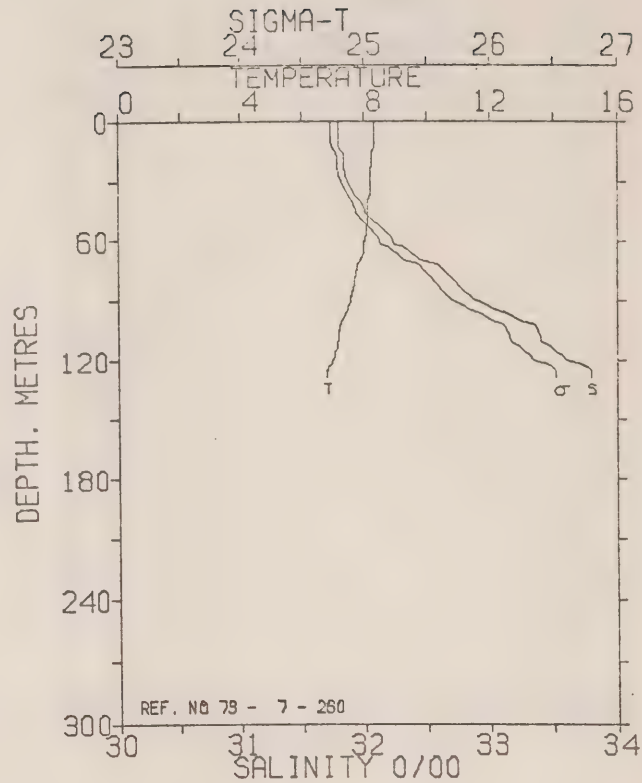
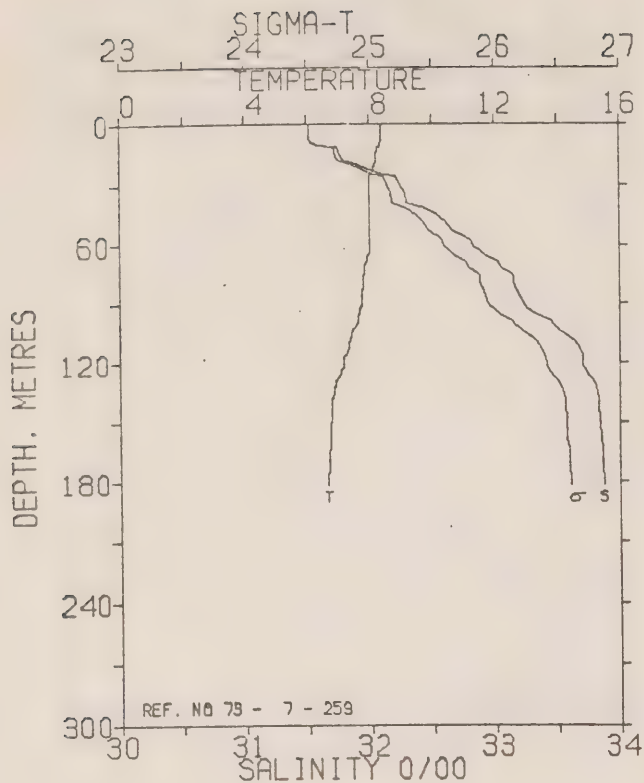
REFERENCE NO. 73- 7-258 STN- JF11 DATE 16/ 4/73  
 POSITION 48-14.6N, 124- 5.0W PST 23.9  
 RESULTS OF STD CAST 56 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.36	31.58	24.57	337.9	0.0	0.0	1480.
10	8.47	32.20	25.03	293.8	0.33	0.02	1481.
20	8.35	32.38	25.19	279.0	0.61	0.06	1481.
30	8.25	32.49	25.29	265.6	0.89	0.13	1481.
50	7.92	32.90	25.66	235.0	1.39	0.33	1481.
75	7.52	33.46	26.16	188.1	1.91	0.66	1480.
100	7.37	33.59	26.28	176.5	2.37	1.07	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.37	31.52	24.52	90.	7.76	33.13	25.87
5.	8.37	31.52	24.52	95.	7.72	33.16	25.89
10.	8.37	31.51	24.51	100.	7.63	33.25	25.98
15.	8.31	31.57	24.57	105.	7.62	33.33	26.04
20.	8.19	31.70	24.68	110.	7.44	33.49	26.19
25.	8.18	31.74	24.71	115.	7.28	33.61	26.31
30.	8.13	31.89	24.84	120.	7.19	33.68	26.38
35.	8.04	32.06	24.99	125.	7.08	33.71	26.42
40.	7.98	32.20	25.10	130.	6.96	33.75	26.46
45.	7.97	32.21	25.11	135.	6.80	33.81	26.53
50.	7.97	32.25	25.14	140.	6.77	33.84	26.56
55.	7.95	32.54	25.37	145.	6.73	33.83	26.56
60.	7.92	32.59	25.42	150.	6.71	33.84	26.57
65.	7.96	32.74	25.53	155.	6.71	33.84	26.57
70.	7.96	32.84	25.61	160.	6.68	33.84	26.57
75.	7.95	32.88	25.64	165.	6.68	33.85	26.58
80.	7.84	33.01	25.76	170.	6.65	33.85	26.58
85.	7.78	33.11	25.85	175.	6.64	33.86	26.60

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.36	31.58	24.57	65.	7.66	33.27	25.99
5.	8.36	31.60	24.58	70.	7.54	33.43	26.13
10.	8.47	32.20	25.03	75.	7.52	33.46	26.16
15.	8.38	32.31	25.13	80.	7.46	33.50	26.20
20.	8.35	32.38	25.19	85.	7.42	33.53	26.22
25.	8.34	32.39	25.20	90.	7.41	33.55	26.24
30.	8.25	32.49	25.29	95.	7.37	33.58	26.27
35.	8.14	32.62	25.41	100.	7.37	33.59	26.28
40.	8.09	32.69	25.47	105.	7.36	33.55	26.25
45.	7.99	32.82	25.59	110.	7.36	33.60	26.29
50.	7.92	32.90	25.66	115.	7.33	33.61	26.30
55.	7.85	33.01	25.75	120.	7.25	33.66	26.35





REFERENCE NO. 73- 7-259 STN- JF12 DATE 17/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 0.4  
 RESULTS OF STD CAST 64 POINTS TAKEN FROM ANALOG TRACE

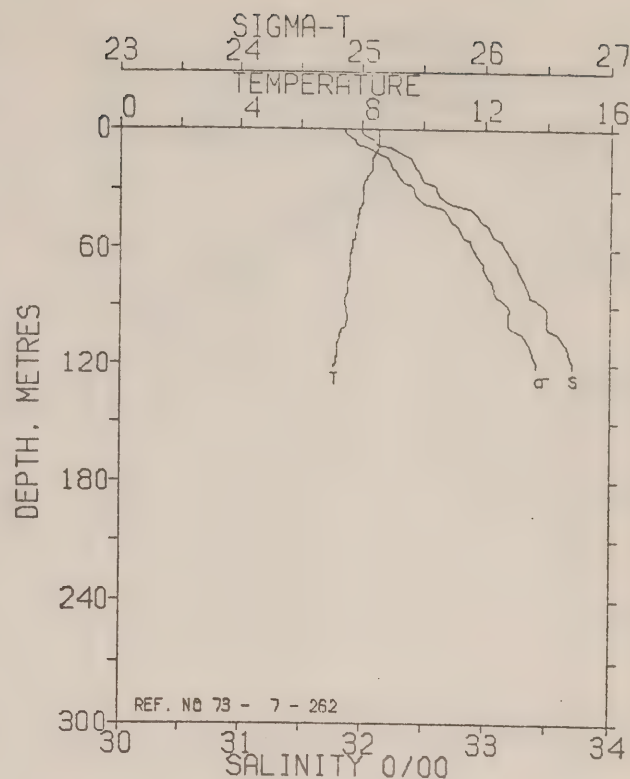
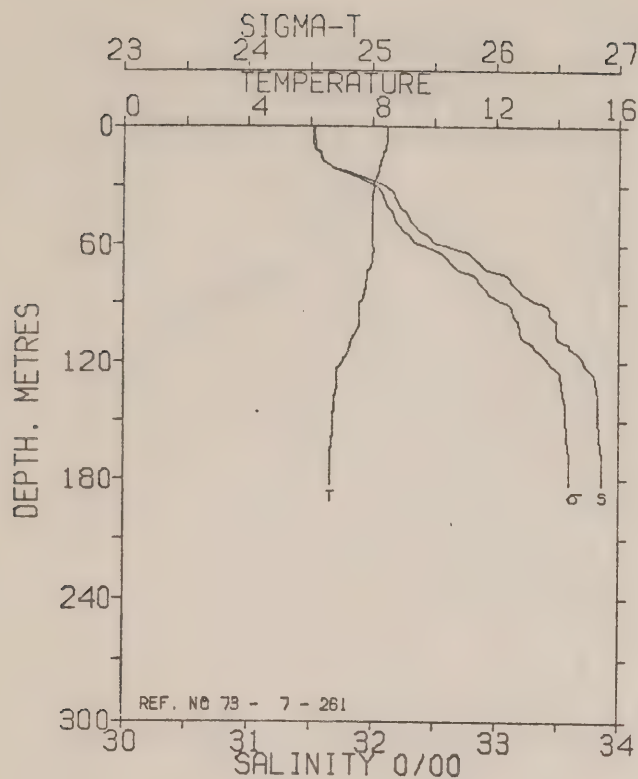
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.37	31.51	24.51	343.3	0.0	0.0	1480.
10	8.35	31.56	24.55	339.8	0.34	0.02	1480.
20	8.16	31.91	24.85	311.7	0.67	0.07	1480.
30	7.98	32.24	25.14	284.2	0.96	0.14	1480.
50	7.97	32.63	25.44	255.8	1.51	0.36	1481.
75	7.78	33.14	25.87	215.5	2.10	0.74	1481.
100	7.56	33.46	26.15	188.8	2.62	1.20	1481.
125	7.03	33.74	26.44	161.5	3.04	1.69	1480.
150	6.71	33.84	26.57	149.7	3.43	2.22	1479.
175	6.63	33.87	26.60	147.0	3.80	2.84	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.37	31.51	24.51	90.	7.72	33.23	25.95
5.	8.37	31.51	24.51	95.	7.62	33.34	26.05
10.	8.35	31.56	24.55	100.	7.56	33.46	26.15
15.	8.20	31.76	24.73	105.	7.37	33.55	26.25
20.	8.16	31.91	24.85	110.	7.21	33.65	26.34
25.	8.04	32.12	25.03	115.	7.20	33.69	26.38
30.	7.98	32.24	25.14	120.	7.13	33.70	26.41
35.	7.98	32.28	25.17	125.	7.03	33.74	26.44
40.	7.97	32.35	25.22	130.	6.88	33.80	26.51
45.	7.96	32.54	25.37	135.	6.81	33.83	26.54
50.	7.97	32.63	25.44	140.	6.76	33.84	26.56
55.	7.99	32.73	25.52	145.	6.74	33.84	26.56
60.	7.97	32.83	25.60	150.	6.71	33.84	26.57
65.	7.91	32.92	25.68	155.	6.69	33.85	26.58
70.	7.82	33.03	25.78	160.	6.69	33.86	26.59
75.	7.78	33.14	25.87	165.	6.62	33.87	26.61
80.	7.75	33.16	25.89	170.	6.65	33.87	26.60
85.	7.73	33.19	25.92	175.	6.61	33.87	26.61

REFERENCE NO. 73- 7-260 STN- JF13 DATE 17/ 4/73  
 POSITION 48-21.6N, 124- 0.7W PST 1.0  
 RESULTS OF STD CAST 52 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.35	31.79	24.73	322.1	0.0	0.0	1480.
10	8.35	31.79	24.73	322.4	0.32	0.02	1480.
20	8.24	31.84	24.79	317.6	0.64	0.07	1480.
30	8.18	31.87	24.82	314.8	0.96	0.15	1480.
50	8.11	32.08	24.99	290.6	1.57	0.40	1480.
75	7.74	32.64	25.48	252.3	2.27	0.84	1480.
100	7.29	33.24	26.02	201.5	2.85	1.35	1479.
125	6.79	33.80	26.52	153.9	3.30	1.86	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.35	31.79	24.73	65.	7.55	32.34	25.22
5.	8.35	31.79	24.73	70.	7.86	32.44	25.31
10.	8.35	31.79	24.73	75.	7.74	32.64	25.48
15.	8.26	31.82	24.77	80.	7.68	32.72	25.56
20.	8.24	31.84	24.79	85.	7.63	32.80	25.63
25.	8.22	31.84	24.79	90.	7.56	32.89	25.71
30.	8.18	31.87	24.82	95.	7.43	33.08	25.87
35.	8.18	31.91	24.85	100.	7.29	33.24	26.02
40.	8.14	31.97	24.90	105.	7.20	33.38	26.14
45.	8.13	32.01	24.93	110.	7.18	33.41	26.17
50.	8.11	32.08	24.99	115.	7.07	33.53	26.28
55.	8.06	32.16	25.06	120.	7.00	33.61	26.35
60.	8.00	32.24	25.13	125.	6.79	33.80	26.52



REFERENCE NO. 73- 7-261 STN- JF12 DATE 17/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 1.7  
 RESULTS OF STD CAST 69 POINTS TAKEN FROM ANALOG TRACE

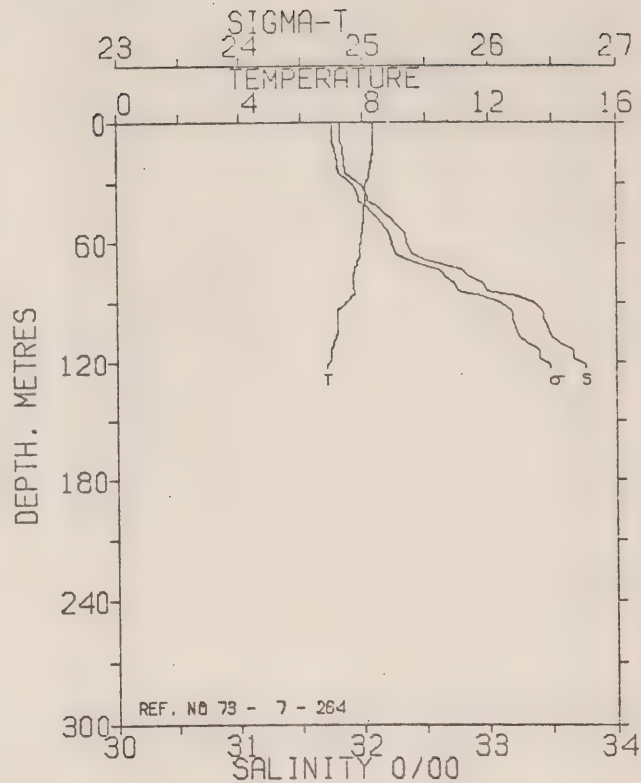
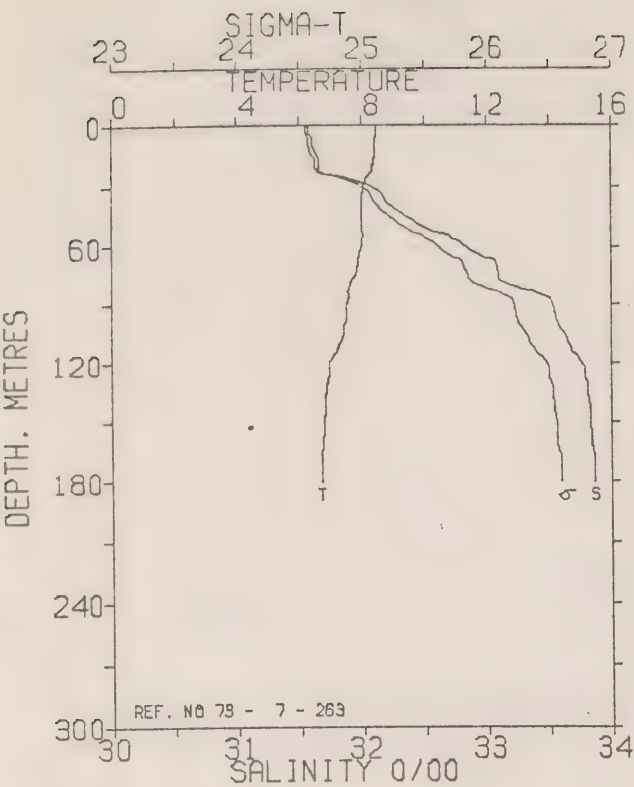
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.46	31.53	24.51	343.0	0.0	0.0	1480.
10	8.43	31.54	24.52	342.5	0.34	0.02	1480.
20	8.21	31.66	24.65	330.4	0.68	0.07	1480.
20	8.02	32.11	25.03	294.7	0.99	0.15	1480.
50	7.99	32.33	25.21	278.1	1.56	0.38	1480.
75	7.83	33.06	25.80	221.8	2.20	0.78	1481.
100	7.56	33.49	26.18	186.6	2.70	1.23	1481.
125	6.84	33.78	26.50	155.8	3.14	1.73	1479.
150	6.72	33.83	26.56	150.5	3.52	2.26	1479.
175	6.61	33.86	26.60	147.6	3.89	2.87	1479.

REFERENCE NO. 73- 7-262 STN- JF11 DATE 17/ 4/73  
 POSITION 48-14.6N, 124- 5.0W PST 2.2  
 RESULTS OF STD CAST 56 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.53	31.99	24.86	309.8	0.0	0.0	1481.
10	8.51	32.25	25.07	290.6	0.30	0.02	1481.
20	8.31	32.46	25.26	272.5	0.58	0.06	1481.
30	8.02	32.61	25.42	257.5	0.85	0.13	1480.
50	7.81	33.04	25.79	223.0	1.33	0.32	1480.
75	7.55	33.29	26.02	200.8	1.86	0.65	1480.
100	7.48	33.50	26.20	184.8	2.33	1.08	1481.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.46	31.53	24.51	95.	7.56	33.43	26.13
5.	8.46	31.53	24.51	100.	7.56	33.49	26.18
10.	8.43	31.54	24.52	105.	7.42	33.49	26.20
15.	8.29	31.59	24.58	110.	7.28	33.56	26.27
20.	8.21	31.66	24.65	115.	7.20	33.66	26.36
25.	8.11	31.89	24.84	120.	7.01	33.71	26.43
30.	8.02	32.11	25.03	125.	6.84	33.78	26.50
35.	8.00	32.18	25.09	130.	6.82	33.81	26.54
40.	8.00	32.21	25.11	135.	6.79	33.82	26.54
45.	8.00	32.28	25.17	140.	6.76	33.84	26.56
50.	7.99	32.33	25.21	145.	6.73	33.83	26.56
55.	7.98	32.45	25.30	150.	6.72	33.83	26.56
60.	7.98	32.59	25.41	155.	6.68	33.84	26.58
65.	7.97	32.79	25.57	160.	6.66	33.85	26.58
70.	7.98	32.86	25.62	165.	6.63	33.85	26.59
75.	7.83	33.06	25.80	170.	6.62	33.86	26.60
80.	7.78	33.13	25.87	175.	6.61	33.86	26.60
85.	7.71	33.21	25.93	180.	6.62	33.86	26.60

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.53	31.99	24.86	65.	7.62	33.21	25.95
5.	8.53	32.09	24.94	70.	7.60	33.26	25.99
10.	8.51	32.25	25.07	75.	7.55	33.29	26.02
15.	8.32	32.40	25.21	80.	7.49	33.34	26.07
20.	8.31	32.46	25.26	85.	7.46	33.36	26.09
25.	8.11	32.49	25.31	90.	7.46	33.49	26.19
30.	8.02	32.61	25.42	95.	7.51	33.50	26.19
35.	8.01	32.67	25.47	100.	7.48	33.50	26.20
40.	7.90	32.89	25.66	105.	7.26	33.60	26.30
45.	7.87	32.96	25.71	110.	7.19	33.66	26.36
50.	7.81	33.04	25.79	115.	7.15	33.68	26.38
55.	7.75	33.10	25.84	120.	7.09	33.71	26.41



REFERENCE NO. 73- 7-263 STN- JF12 DATE 17/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 2.7  
 RESULTS OF STD CAST 75 POINTS TAKEN FROM ANALOG TRACE

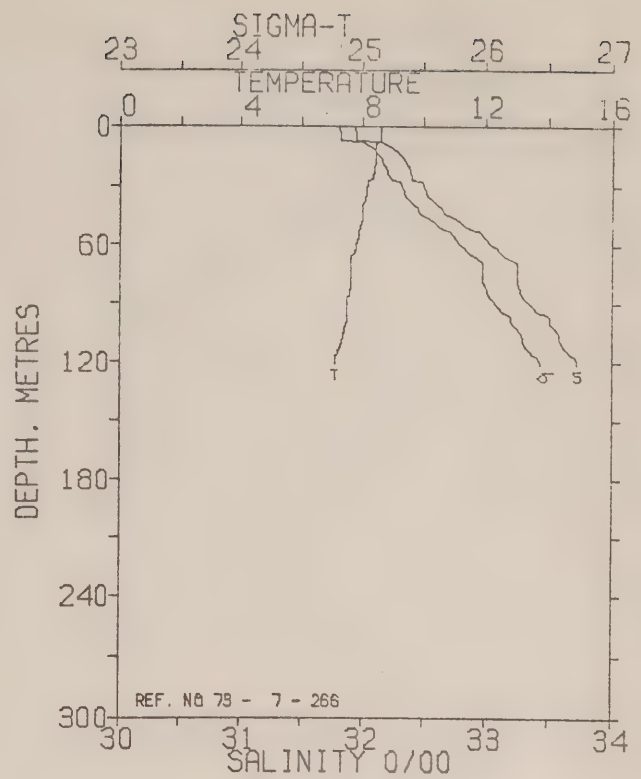
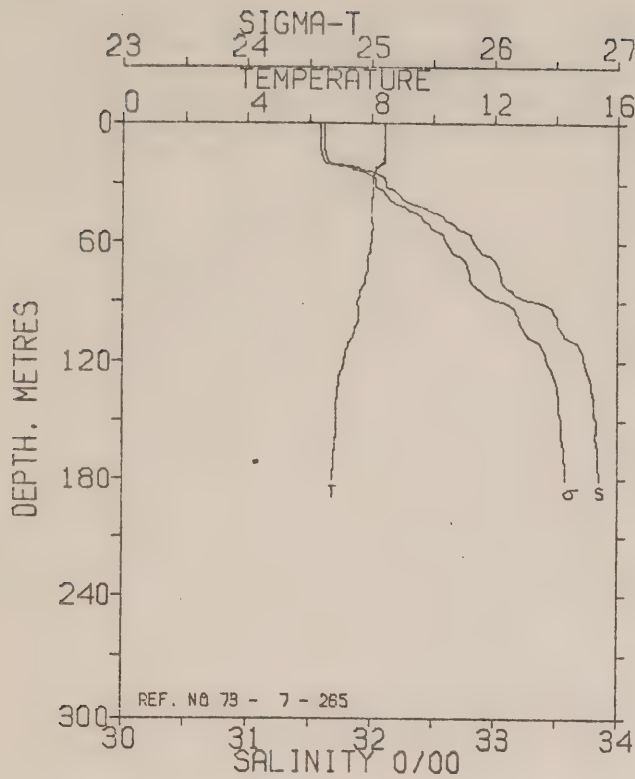
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.45	31.56	24.54	340.7	0.0	0.0	1480.
10	8.42	31.60	24.57	337.7	0.34	0.02	1480.
20	8.35	31.65	24.62	333.3	0.67	0.07	1480.
30	8.04	32.08	25.00	297.2	0.99	0.15	1480.
50	7.97	32.49	25.33	265.8	1.56	0.28	1480.
75	7.73	33.10	25.84	217.7	2.15	0.75	1481.
100	7.42	33.57	26.26	178.7	2.63	1.18	1480.
125	6.91	33.79	26.50	156.2	3.04	1.65	1479.
150	6.77	33.84	26.56	151.1	3.43	2.19	1479.
175	6.66	33.86	26.59	148.0	3.80	2.81	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.45	31.56	24.54	90.	7.50	33.53	26.22
5.	8.44	31.59	24.56	95.	7.48	33.55	26.23
10.	8.42	31.60	24.57	100.	7.42	33.57	26.26
15.	8.39	31.64	24.61	105.	7.35	33.63	26.31
20.	8.35	31.65	24.62	110.	7.23	33.66	26.36
25.	8.16	31.85	24.80	115.	7.08	33.72	26.42
30.	8.04	32.08	25.00	120.	6.93	33.76	26.48
35.	8.01	32.17	25.08	125.	6.91	33.79	26.50
40.	8.01	32.24	25.13	130.	6.86	33.81	26.52
45.	8.00	32.37	25.23	135.	6.81	33.82	26.54
50.	7.97	32.49	25.33	140.	6.81	33.82	26.54
55.	8.02	32.71	25.50	145.	6.75	33.83	26.55
60.	7.94	32.84	25.61	150.	6.77	33.84	26.56
65.	7.85	32.96	25.72	155.	6.72	33.84	26.57
70.	7.82	33.08	25.82	160.	6.74	33.84	26.56
75.	7.73	33.10	25.84	165.	6.67	33.86	26.59
80.	7.60	33.20	25.95	170.	6.66	33.86	26.59
85.	7.55	33.46	26.16	175.	6.66	33.86	26.59

REFERENCE NO. 73- 7-264 STN- JF13 DATE 17/ 4/73  
 POSITION 48-21.6N, 124- 0.7W PST 3.2  
 RESULTS OF STD CAST 51 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.36	31.81	24.75	320.8	0.0	0.0	1480.
10	8.36	31.82	24.75	320.5	0.32	0.02	1480.
20	8.27	31.85	24.79	317.2	0.64	0.06	1480.
30	8.11	31.97	24.90	306.6	0.95	0.14	1480.
50	8.00	32.26	25.15	283.8	1.55	0.39	1480.
75	7.72	32.82	25.63	238.0	2.22	0.81	1480.
100	7.19	33.45	26.20	184.6	2.74	1.27	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.36	31.81	24.75	65.	7.88	32.38	25.26
5.	8.36	31.82	24.75	70.	7.83	32.57	25.42
10.	8.36	31.82	24.75	75.	7.72	32.82	25.63
15.	8.29	31.84	24.78	80.	7.72	32.95	25.73
20.	8.27	31.85	24.79	85.	7.74	33.11	25.85
25.	8.18	31.86	24.81	90.	7.43	33.36	26.09
30.	8.11	31.97	24.90	95.	7.21	33.44	26.19
35.	8.09	32.03	24.95	100.	7.19	33.45	26.20
40.	8.08	32.06	24.98	105.	7.16	33.48	26.23
45.	8.04	32.17	25.07	110.	7.03	33.57	26.31
50.	8.00	32.26	25.15	115.	6.96	33.67	26.40
55.	7.95	32.34	25.22	120.	6.87	33.73	26.46



REFERENCE NO. 73- 7-265 STN- JF12 DATE 17/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 3.9  
 RESULTS OF STD CAST 82 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.40	31.60	24.58	337.0	0.0	0.0	1480.
10	8.39	31.61	24.59	336.6	0.34	0.02	1480.
20	8.34	31.65	24.62	333.2	0.67	0.07	1480.
30	8.03	32.11	25.03	294.4	0.98	0.15	1480.
50	8.01	32.65	25.45	254.9	1.53	0.37	1481.
75	7.81	33.04	25.79	223.3	2.12	0.75	1481.
100	7.52	33.51	26.20	184.6	2.64	1.20	1481.
125	7.00	33.76	26.46	155.6	3.06	1.69	1479.
150	6.83	33.82	26.54	152.8	3.45	2.23	1479.
175	6.72	33.85	26.57	145.8	3.83	2.86	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.40	31.60	24.58	95.	7.56	33.48	26.17
5.	8.39	31.61	24.59	100.	7.52	33.51	26.20
10.	8.39	31.61	24.59	105.	7.42	33.55	26.24
15.	8.38	31.62	24.59	110.	7.22	33.66	26.36
20.	8.34	31.65	24.62	115.	7.15	33.70	26.40
25.	8.08	32.02	24.95	120.	7.08	33.73	26.43
30.	8.03	32.11	25.03	125.	7.00	33.76	26.46
35.	8.02	32.20	25.10	130.	6.93	33.78	26.49
40.	8.01	32.20	25.18	135.	6.87	33.80	26.51
45.	7.98	32.53	25.36	140.	6.85	33.81	26.52
50.	8.01	22.65	25.45	145.	6.85	33.81	26.53
55.	7.98	32.77	25.55	150.	6.83	33.82	26.54
60.	7.96	32.83	25.60	155.	6.83	33.82	26.54
65.	7.91	22.89	25.66	160.	6.80	33.83	26.55
70.	7.85	33.01	25.76	165.	6.77	33.84	26.56
75.	7.81	33.04	25.79	170.	6.73	33.84	26.57
80.	7.77	33.06	25.81	175.	6.73	33.85	26.57
85.	7.63	33.15	25.90	180.	6.71	33.85	26.58

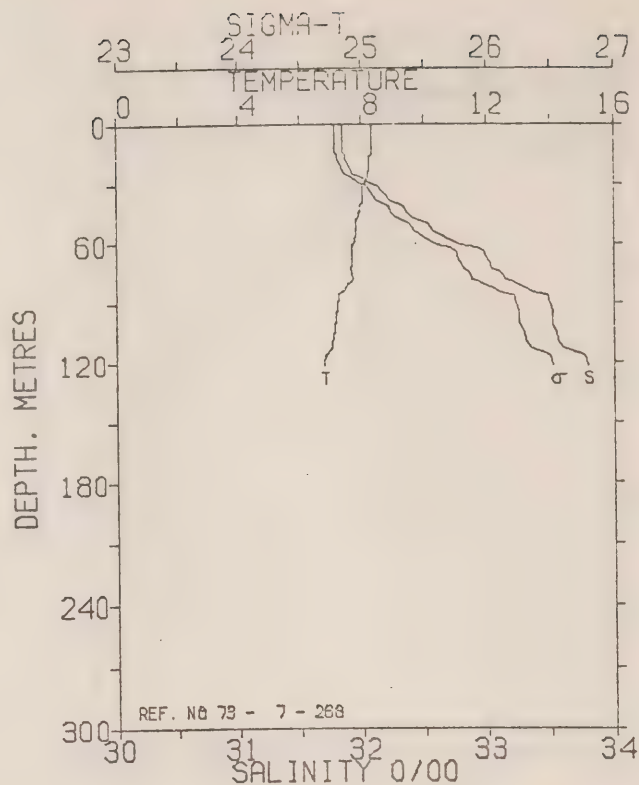
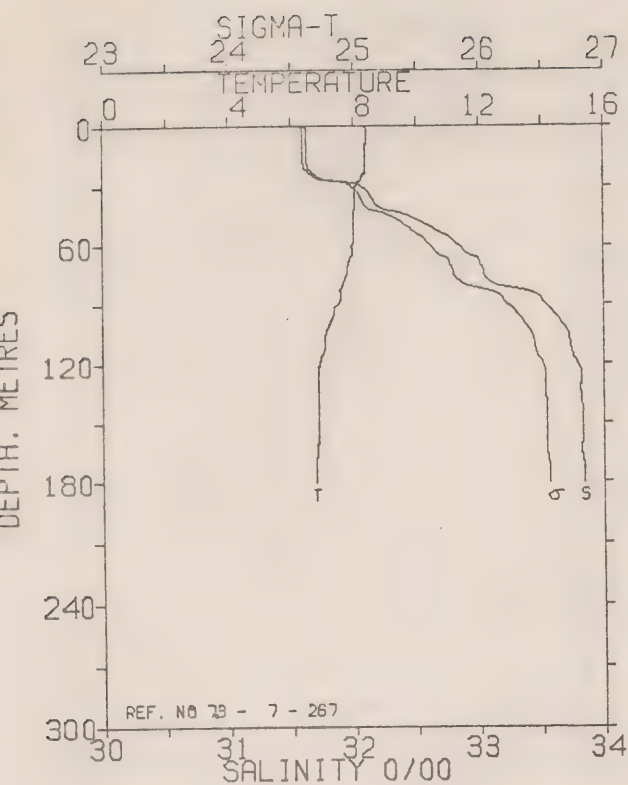
REFERENCE NO. 73- 7-266 STN- JF11 DATE 17/ 4/73  
 POSITION 48-14.6N, 124- 5.0W PST 4.3  
 RESULTS OF STD CAST 68 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.58	31.93	24.81	315.0	0.0	0.0	1481.
10	8.41	32.21	25.05	292.3	0.31	0.02	1481.
20	8.38	32.38	25.19	279.4	0.59	0.06	1481.
30	8.14	32.50	25.32	267.1	0.87	0.13	1481.
50	7.93	32.84	25.61	239.6	1.38	0.34	1481.
75	7.62	33.25	25.98	204.7	1.93	0.68	1480.
100	7.43	33.51	26.21	183.3	2.42	1.12	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.58	31.93	24.81	65.	7.62	33.15	25.90
5.	8.59	31.94	24.81	70.	7.62	33.25	25.98
10.	8.41	32.21	25.05	75.	7.62	33.25	25.98
15.	8.41	32.32	25.14	80.	7.61	33.26	25.99
20.	8.38	32.38	25.19	85.	7.55	33.29	26.02
25.	8.33	32.41	25.22	90.	7.48	33.25	26.08
30.	8.14	32.50	25.32	95.	7.47	33.49	26.19
35.	8.08	32.53	25.35	100.	7.43	33.51	26.21
40.	8.01	32.62	25.43	105.	7.32	33.58	26.28
45.	7.99	32.71	25.50	110.	7.28	33.60	26.30
50.	7.93	32.84	25.61	115.	7.17	33.66	26.37
55.	7.85	32.98	25.73	120.	7.08	33.73	26.43





REFERENCE NO. 73- 7-267 STN- JF12 DATE 17/ 4/73  
 POSITION 48-17.2N, 124- 3.4W PST 4.7  
 RESULTS OF STD CAST 71 POINTS TAKEN FROM ANALOG TRACE

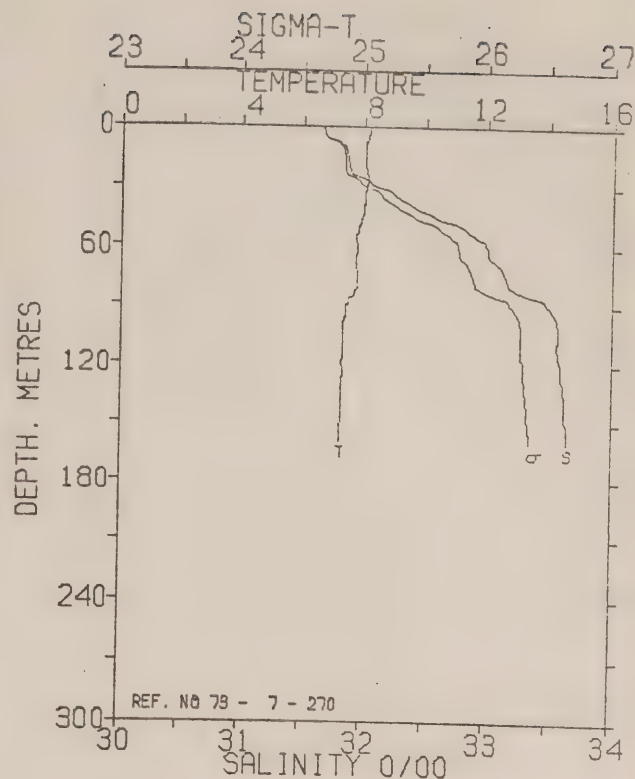
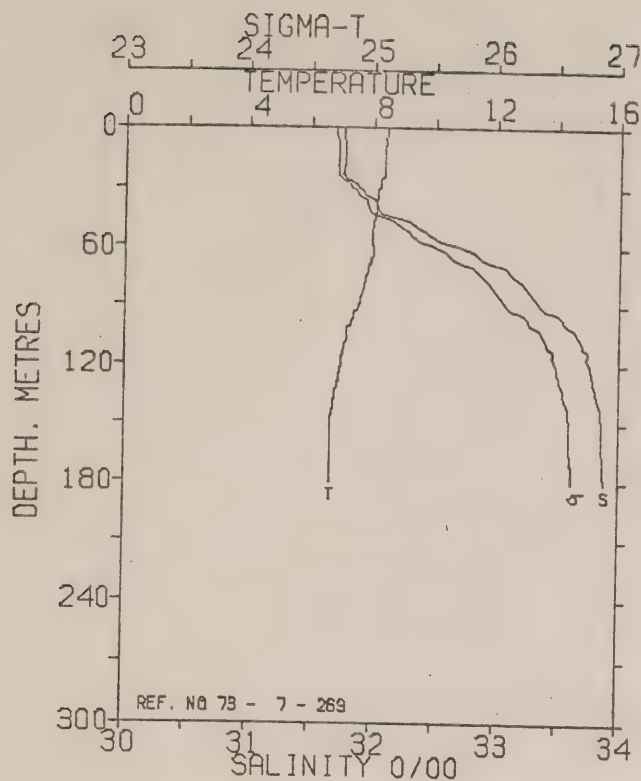
REFERENCE NO. 73- 7-268 STN- JF13 DATE 17/ 4/73  
 POSITION 48-21.6N, 124- 0.7W PST 5.2  
 RESULTS OF STD CAST 64 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.38	31.61	24.59	335.9	0.0	0.0	1480.
10	8.38	31.62	24.59	335.7	0.34	0.02	1480.
20	8.38	31.63	24.60	334.9	0.67	0.07	1480.
30	8.06	32.06	24.98	299.0	0.99	0.15	1480.
50	7.98	32.60	25.42	258.2	1.56	0.28	1481.
75	7.73	33.04	25.80	221.9	2.15	0.75	1481.
100	7.18	33.67	26.37	168.1	2.63	1.17	1460.
125	6.83	33.82	26.53	152.9	3.02	1.63	1479.
150	6.82	33.82	26.54	152.5	3.41	2.17	1479.
175	6.75	33.84	26.56	150.9	3.79	2.60	1479.

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.33	31.85	24.78	317.4	0.0	0.0	1480.
10	8.33	31.85	24.78	317.9	0.22	0.02	1480.
20	8.25	31.89	24.82	314.0	0.63	0.06	1480.
30	8.07	32.09	25.01	296.9	0.94	0.14	1480.
50	7.83	32.53	25.38	261.4	1.50	0.27	1480.
75	7.71	33.12	25.86	216.0	2.10	0.75	1481.
100	7.16	33.52	26.26	179.0	2.57	1.17	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.38	31.61	24.59	85.	7.54	33.47	26.17
5.	8.38	31.62	24.59	90.	7.42	33.54	26.23
10.	8.38	31.62	24.59	95.	7.28	33.61	26.31
15.	8.38	31.62	24.59	100.	7.18	33.67	26.37
20.	8.38	31.63	24.60	105.	7.04	33.72	26.43
25.	8.28	31.71	24.68	110.	7.03	33.74	26.45
30.	8.06	32.06	24.98	115.	6.95	33.75	26.47
35.	8.03	32.14	25.05	120.	6.88	33.79	26.50
40.	8.02	32.20	25.10	125.	6.83	33.82	26.53
45.	7.99	32.45	25.30	130.	6.83	33.82	26.53
50.	7.98	32.60	25.42	135.	6.82	33.83	26.54
55.	7.97	32.76	25.54	140.	6.83	33.83	26.54
60.	7.93	32.85	25.62	145.	6.84	33.82	26.54
65.	7.88	32.93	25.69	150.	6.89	33.77	26.49
70.	7.81	33.01	25.77	155.	6.84	33.80	26.52
75.	7.73	33.04	25.80	160.	6.75	33.84	26.57
80.	7.64	33.14	25.89	165.	6.80	33.84	26.56

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.33	31.85	24.78	65.	7.71	32.58	25.76
5.	8.33	31.85	24.78	70.	7.70	33.02	25.79
10.	8.37	31.81	24.74	75.	7.71	33.12	25.86
15.	8.32	31.86	24.79	80.	7.59	33.22	25.96
20.	8.25	31.89	24.82	85.	7.28	33.40	26.15
25.	8.22	31.93	24.86	90.	7.22	33.50	26.23
30.	8.07	32.09	25.01	95.	7.19	33.52	26.25
35.	8.04	32.18	25.08	100.	7.16	33.52	26.26
40.	7.96	32.29	25.18	105.	7.09	33.55	26.29
45.	7.91	32.37	25.25	110.	7.06	33.58	26.32
50.	7.83	32.53	25.38	115.	6.90	33.71	26.45
55.	7.81	32.61	25.45	120.	6.81	33.79	26.51



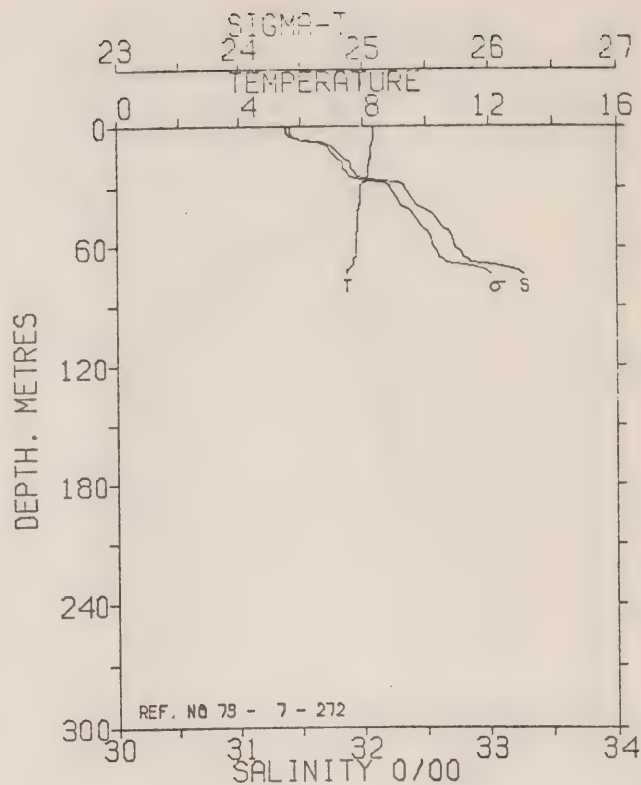
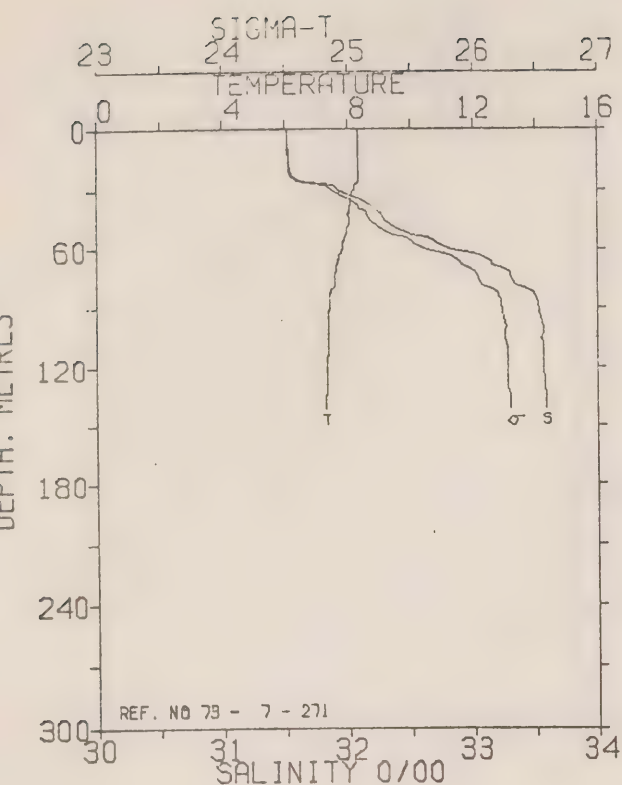
REFERENCE NO. 73- 7-269 STN- JF4 DATE 17/ 4/73  
 POSITION 48-18.2N, 124- 4.5W PST 14.0  
 RESULTS OF STD CAST 85 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.42	31.75	24.69	326.1	0.0	0.0	1480.
10	8.36	31.76	24.71	324.9	0.33	0.02	1480.
20	8.31	31.75	24.71	325.3	0.65	0.07	1480.
30	8.16	31.87	24.82	314.5	0.97	0.15	1480.
50	7.97	32.35	25.23	276.2	1.57	0.39	1480.
75	7.74	33.14	25.88	214.5	2.18	0.78	1481.
100	7.27	33.57	26.28	176.7	2.67	1.21	1480.
125	6.88	33.78	26.50	156.2	3.08	1.68	1479.
150	6.65	33.86	26.59	147.6	3.46	2.21	1479.
175	6.61	33.88	26.61	146.4	3.83	2.82	1479.

REFERENCE NO. 73- 7-270 STN- JF6 DATE 17/ 4/73  
 POSITION 48-14.5N, 123-34.7W PST 18.8  
 RESULTS OF STD CAST 74 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.15	31.66	24.66	329.0	0.0	0.0	1479.
10	8.02	31.83	24.81	315.0	0.32	0.02	1479.
20	8.06	31.87	24.84	312.9	0.64	0.06	1479.
30	8.08	32.11	25.02	295.5	0.94	0.14	1480.
50	7.85	32.81	25.60	240.7	1.45	0.36	1480.
75	7.75	33.15	25.88	214.0	2.05	0.72	1481.
100	7.32	33.57	26.27	177.4	2.53	1.15	1480.
125	7.30	33.60	26.30	175.5	2.97	1.65	1480.
150	7.24	33.64	26.34	172.0	3.41	2.26	1481.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.42	31.75	24.69	90.	7.45	33.36	26.08	0.	8.15	31.66	24.66	85.	7.62	33.38	26.08
5.	8.36	31.75	24.70	95.	7.33	33.51	26.23	5.	8.13	31.68	24.68	90.	7.45	33.50	26.20
10.	8.36	31.76	24.71	100.	7.27	33.57	26.28	10.	8.02	31.83	24.81	95.	7.35	33.55	26.25
15.	8.34	31.76	24.71	105.	7.12	33.66	26.37	15.	8.04	31.86	24.83	100.	7.32	33.57	26.27
20.	8.31	31.75	24.71	110.	7.00	33.74	26.42	20.	8.06	31.87	24.84	105.	7.31	33.57	26.27
25.	8.25	31.77	24.73	115.	7.00	33.74	26.42	25.	8.14	31.96	24.89	110.	7.31	33.57	26.28
30.	8.16	31.87	24.82	120.	6.93	33.76	26.45	30.	8.08	32.11	25.02	115.	7.32	33.56	26.28
35.	8.10	31.97	24.91	125.	6.88	33.78	26.50	35.	8.05	32.26	25.15	120.	7.29	33.60	26.30
40.	8.07	32.02	24.95	130.	6.82	33.79	26.52	40.	8.00	32.40	25.26	125.	7.30	33.60	26.30
45.	8.02	32.17	25.08	135.	6.74	33.82	26.55	45.	7.93	32.58	25.41	130.	7.27	33.62	26.32
50.	7.97	32.35	25.23	140.	6.68	33.85	26.58	50.	7.85	32.81	25.60	135.	7.27	33.62	26.32
55.	7.94	32.47	25.32	145.	6.66	33.85	26.59	55.	7.73	32.91	25.70	140.	7.27	33.63	26.32
60.	7.97	32.72	25.51	150.	6.65	33.86	26.59	60.	7.75	33.01	25.77	145.	7.25	33.63	26.33
65.	7.93	32.85	25.62	155.	6.63	33.86	26.59	65.	7.73	33.02	25.78	150.	7.24	33.64	26.34
70.	7.84	33.05	25.79	160.	6.69	33.86	26.60	70.	7.74	33.11	25.86	155.	7.23	33.65	26.35
75.	7.74	33.14	25.88	165.	6.61	33.87	26.61	75.	7.75	33.15	25.88	160.	7.22	33.65	26.35
80.	7.65	33.24	25.96	170.	6.61	33.87	26.61								
85.	7.56	33.29	26.02	175.	6.61	33.88	26.61								



REFERENCE NO. 73- 7-271 STN- S1 DATE 17/ 4/73  
 POSITION 48-14.2N, 123-26.8W PST 19.4  
 RESULTS OF STD CAST 59 POINTS TAKEN FROM ANALCG TRACE

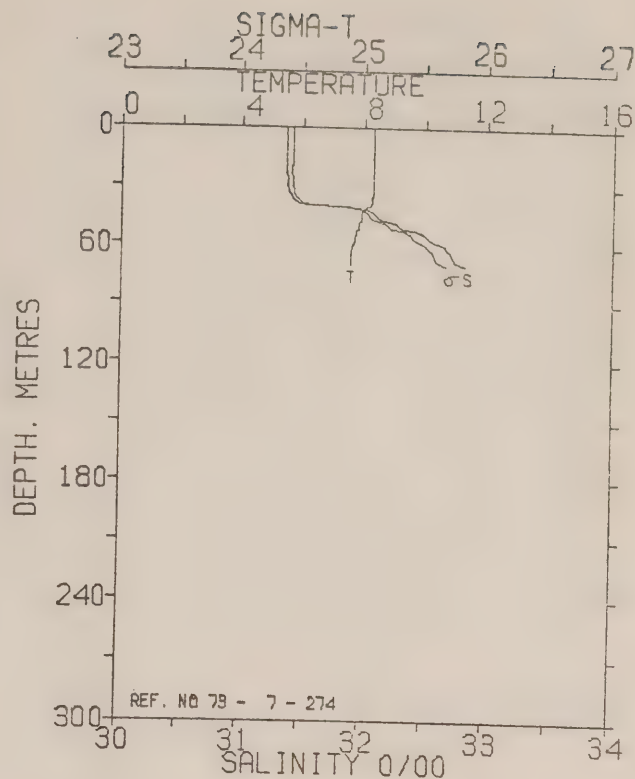
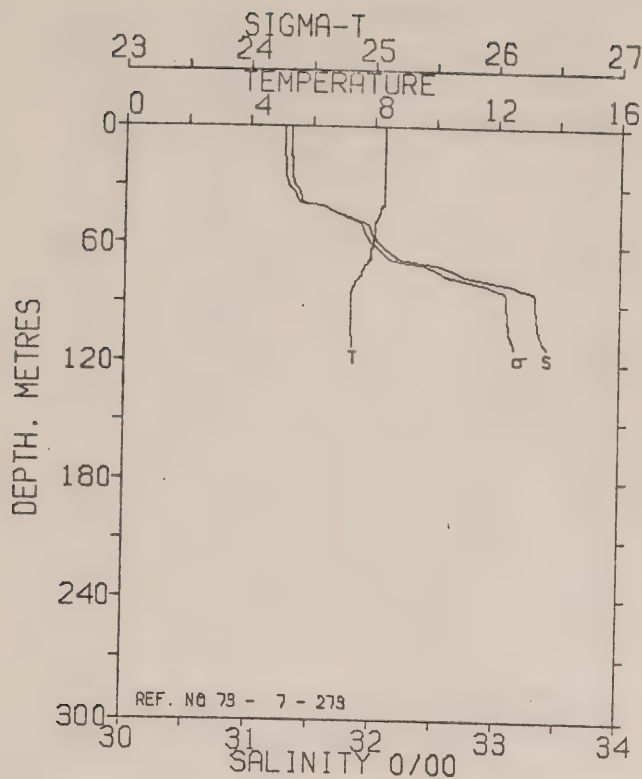
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA σ	POT EN	SOUND VEL
0	8.33	31.51	24.52	342.7	0.0	0.0	1480.
10	8.33	31.52	24.52	342.6	0.34	0.02	1480.
20	8.36	31.54	24.53	341.6	0.69	0.07	1480.
30	8.16	31.93	24.86	310.3	1.02	0.15	1480.
50	7.95	32.41	25.27	271.8	1.59	0.39	1480.
75	7.55	33.31	26.04	199.3	2.17	0.75	1480.
100	7.33	33.56	26.26	178.3	2.63	1.16	1480.
125	7.30	33.57	26.28	177.4	3.07	1.67	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.33	31.51	24.52	75.	7.55	33.31	26.04
5.	8.33	31.51	24.52	80.	7.44	33.44	26.16
10.	8.33	31.52	24.52	85.	7.40	33.51	26.22
15.	8.32	31.52	24.52	90.	7.37	33.53	26.23
20.	8.36	31.54	24.53	95.	7.36	33.54	26.25
25.	8.35	31.59	24.58	100.	7.33	33.56	26.26
30.	8.16	31.93	24.86	105.	7.34	33.55	26.25
35.	8.08	32.11	25.02	110.	7.33	33.57	26.27
40.	8.03	32.21	25.10	115.	7.30	33.57	26.27
45.	8.02	32.29	25.17	120.	7.30	33.56	26.27
50.	7.95	32.41	25.27	125.	7.30	33.58	26.28
55.	7.85	32.67	25.49	130.	7.30	33.58	26.28
60.	7.77	32.84	25.63	135.	7.28	33.59	26.29
65.	7.65	33.12	25.88	140.	7.28	33.59	26.29

REFERENCE NO. 73- 7-272 STN- S2 DATE 17/ 4/73  
 POSITION 48-11.4N, 123-17.9W PST 20.2  
 RESULTS OF STD CAST 41 POINTS TAKEN FROM ANALCG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA σ	PCT EN	SOUND VEL
0	8.35	31.38	24.41	352.7	0.0	0.0	1480.
10	8.25	31.74	24.71	324.9	0.35	0.02	1480.
20	8.17	31.90	24.84	312.2	0.66	0.07	1480.
30	7.91	32.33	25.22	276.8	0.96	0.14	1480.
50	7.80	32.63	25.46	253.5	1.49	0.36	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.35	31.38	24.41	40.	7.85	32.45	25.32
5.	8.36	31.40	24.43	45.	7.81	32.57	25.42
10.	8.25	31.74	24.71	50.	7.80	32.63	25.46
15.	8.22	31.83	24.78	55.	7.77	32.71	25.53
20.	8.17	31.90	24.84	60.	7.75	32.74	25.56
25.	8.13	31.96	24.90	65.	7.73	32.79	25.61
30.	7.91	32.33	25.22	70.	7.59	33.11	25.87



REFERENCE NO. 73-7-273 STN- S3 DATE 17/ 4/73  
 POSITION 48-14.2N, 123-18.0W PST 20.6  
 RESULTS OF STD CAST 44 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.33	31.27	24.33	360.6	0.0	0.0	1479.
10	8.33	31.27	24.33	361.0	0.36	0.02	1480.
20	8.33	31.28	24.34	360.4	0.72	0.07	1480.
30	8.33	31.31	24.36	358.5	1.08	0.17	1480.
50	8.02	31.96	24.91	306.3	1.76	0.44	1480.
75	7.59	32.70	25.56	245.2	2.48	0.90	1480.
100	7.28	33.33	26.09	195.1	2.99	1.35	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.33	31.27	24.33	60.	7.97	32.05	24.99
5.	8.33	31.27	24.33	65.	7.89	32.14	25.07
10.	8.33	31.27	24.33	70.	7.76	32.38	25.28
15.	8.33	31.27	24.33	75.	7.59	32.70	25.56
20.	8.33	31.28	24.33	80.	7.38	33.05	25.86
25.	8.35	31.26	24.32	85.	7.28	33.31	26.07
30.	8.32	31.30	24.35	90.	7.28	33.31	26.08
35.	8.32	31.37	24.41	95.	7.28	33.32	26.08
40.	8.32	31.48	24.49	100.	7.28	33.33	26.09
45.	8.15	31.74	24.72	105.	7.29	33.34	26.10
50.	8.02	31.96	24.91	110.	7.30	33.39	26.13

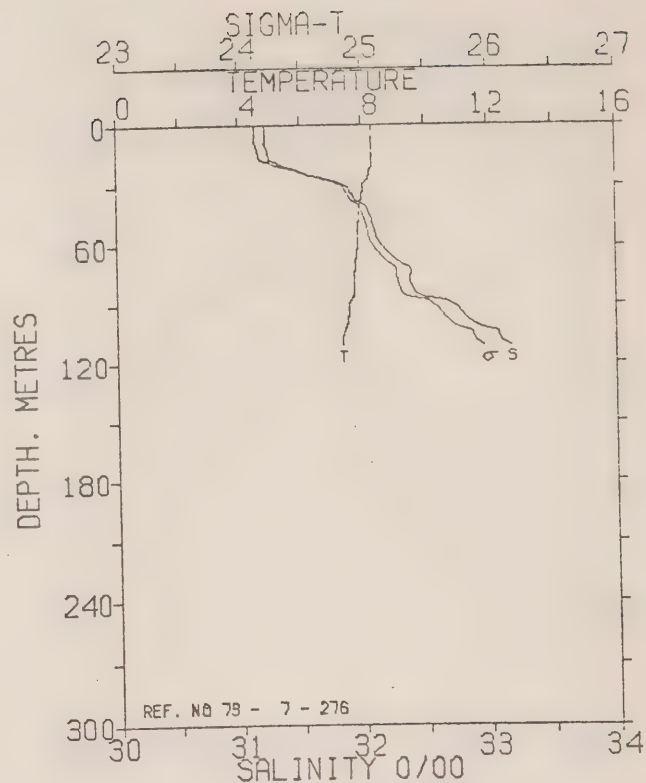
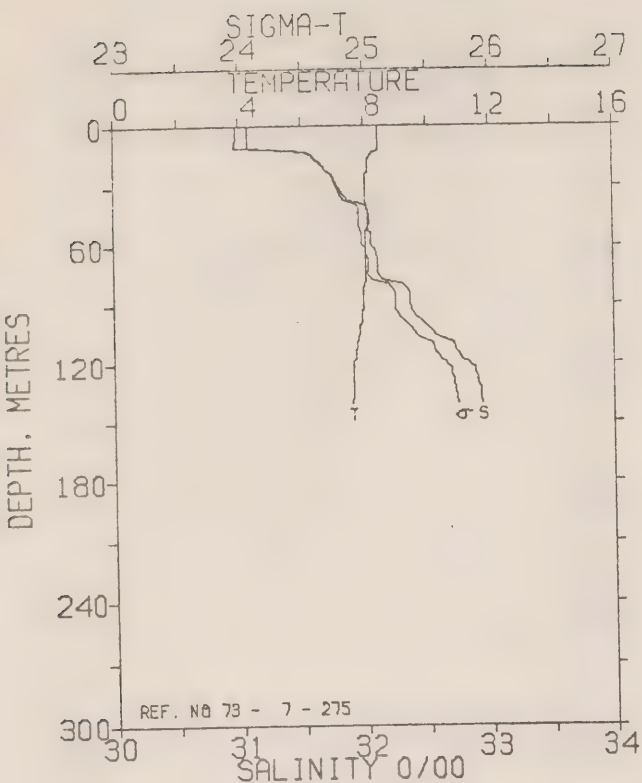
REFERENCE NO. 73-7-274 STN- S4 DATE 17/ 4/73  
 POSITION 48-17.2N, 123-18.0W PST 21.0  
 RESULTS OF STD CAST 33 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.29	31.35	24.40	354.1	0.0	0.0	1479.
10	8.29	31.36	24.40	353.8	0.35	0.02	1479.
20	8.29	31.36	24.40	354.1	0.71	0.07	1480.
30	8.28	31.37	24.41	353.4	1.06	0.16	1480.
50	7.82	32.28	25.19	279.7	1.71	0.42	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.29	31.35	24.40	40.	8.21	31.56	24.57
5.	8.29	31.36	24.41	45.	7.91	32.10	25.03
10.	8.29	31.36	24.40	50.	7.82	32.28	25.19
15.	8.29	31.36	24.40	55.	7.69	32.50	25.38
20.	8.29	31.34	24.39	60.	7.61	32.66	25.51
25.	8.29	31.37	24.41	65.	7.58	32.71	25.56
30.	8.28	31.37	24.41	70.	7.54	32.79	25.63





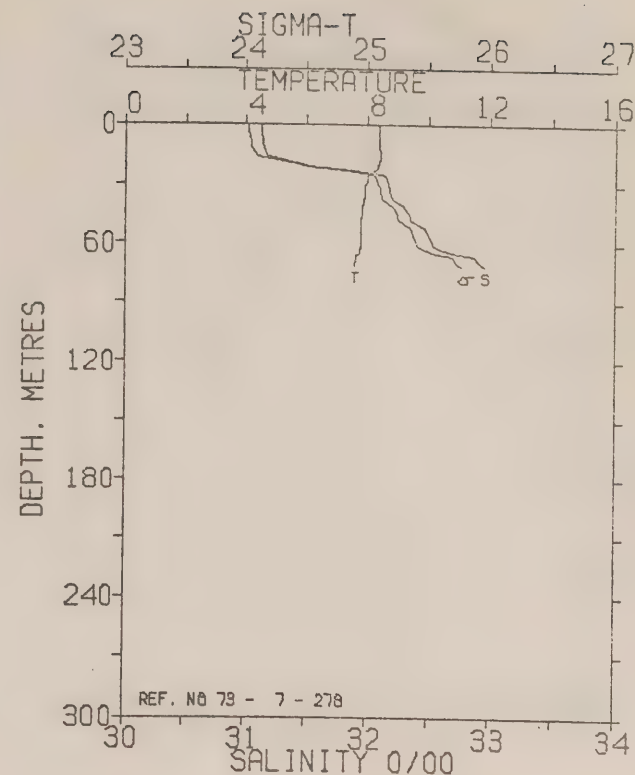
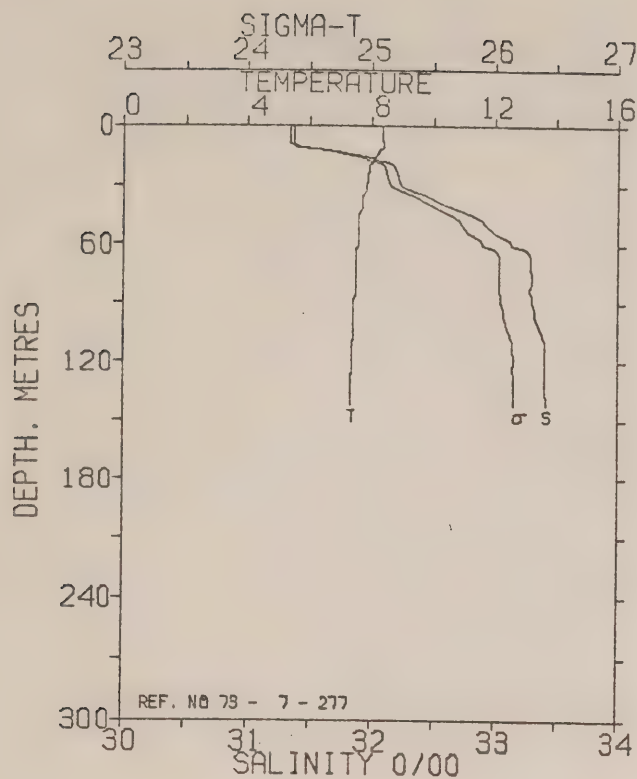
REFERENCE NO. 73- 7-275 STN- 55 DATE 17/ 4/73  
 POSITION 48-14.4N, 123- 9.0W PST 21.2  
 RESULTS OF STD CAST 72 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.46	30.97	24.08	384.7	0.0	0.0	1479.
10	8.46	30.96	24.07	385.9	0.39	0.02	1480.
20	8.11	31.67	24.67	328.4	0.73	0.07	1479.
30	8.06	31.79	24.77	319.0	1.05	0.15	1479.
50	8.10	32.04	24.96	301.6	1.67	0.40	1480.
75	8.04	32.11	25.03	295.4	2.41	0.88	1481.
100	7.85	32.48	25.35	265.5	3.10	1.49	1481.
125	7.62	32.89	25.70	232.6	3.72	2.20	1481.

REFERENCE NO. 73- 7-276 STN- 53 DATE 17/ 4/73  
 POSITION 48-14.2N, 123-18.0W PST 22.4  
 RESULTS OF STD CAST 47 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.35	31.13	24.22	371.3	0.0	0.0	1479.
10	8.36	31.14	24.22	371.2	0.37	0.02	1479.
20	8.33	31.30	24.35	359.1	0.74	0.08	1480.
30	8.04	31.86	24.83	313.5	1.07	0.16	1479.
50	7.87	32.10	25.04	293.9	1.68	0.41	1479.
75	7.74	32.38	25.28	271.0	2.39	0.86	1480.
100	7.48	32.89	25.72	230.2	3.02	1.42	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.46	30.97	24.08	75.	8.04	32.11	25.03	60.	7.85	32.17	25.10	100.	7.48	32.89	25.72
5.	8.46	30.97	24.08	80.	7.97	32.32	25.20	65.	7.81	32.24	25.16	105.	7.37	33.08	25.88
10.	8.46	30.96	24.07	85.	7.94	32.36	25.24	70.	7.76	32.33	25.24	110.	7.34	33.16	25.95
15.	8.16	31.58	24.60	90.	7.94	32.37	25.24	75.	7.74	32.38	25.28				
20.	8.11	31.67	24.67	95.	7.92	32.40	25.27	80.	7.74	32.39	25.29				
25.	8.06	31.76	24.75	100.	7.85	32.48	25.35	85.	7.71	32.44	25.34				
30.	8.06	31.79	24.77	105.	7.82	32.56	25.41	90.	7.58	32.73	25.58				
35.	8.06	31.85	24.82	110.	7.72	32.71	25.54	95.	7.53	32.81	25.65				
40.	8.09	32.01	24.94	115.	7.68	32.75	25.58	100.	7.48	32.89	25.72				
45.	8.12	32.04	24.96	120.	7.63	32.83	25.65	105.	7.37	33.08	25.88				
50.	8.10	32.04	24.96	125.	7.62	32.89	25.70	110.	7.34	33.16	25.95				
55.	8.05	32.05	24.98	130.	7.59	32.91	25.71								
60.	8.04	32.07	24.99	135.	7.59	32.93	25.73								
65.	8.02	32.10	25.02	140.	7.58	32.94	25.74								



REFERENCE NO. 73- 7-277 STN- S1 DATE 17/ 4/73  
 POSITION 48-14.2N, 123-26.8W PST 23.0  
 RESULTS OF STD CAST 61 POINTS TAKEN FROM ANALOG TRACE

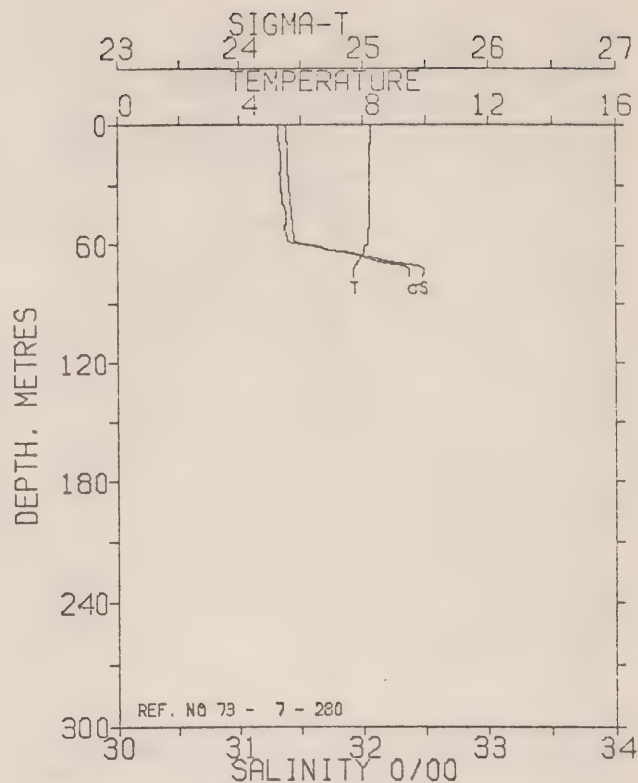
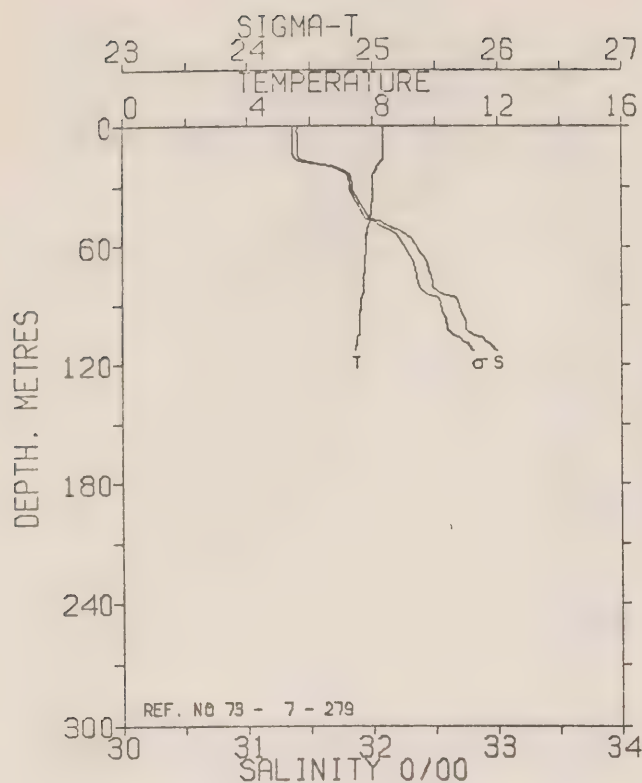
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.36	31.33	24.37	356.6	0.0	0.0	1480.
10	8.36	31.36	24.40	354.6	0.36	0.02	1480.
20	7.90	32.17	25.09	286.3	0.67	0.07	1479.
30	7.84	32.23	25.15	283.3	0.56	0.14	1479.
50	7.57	32.93	25.73	227.8	1.46	0.34	1479.
75	7.48	33.29	26.03	199.9	1.99	0.67	1480.
100	7.40	33.34	26.08	195.6	2.48	1.12	1480.
125	7.34	33.41	26.14	190.2	2.96	1.67	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.36	31.33	24.37	75.	7.48	33.29	26.03
5.	8.36	31.33	24.37	80.	7.48	33.29	26.03
10.	8.36	31.36	24.40	85.	7.46	33.29	26.03
15.	8.11	31.91	24.86	90.	7.43	33.31	26.05
20.	7.90	32.17	25.09	95.	7.42	33.32	26.06
25.	7.87	32.20	25.12	100.	7.40	33.34	26.08
30.	7.84	32.23	25.15	105.	7.38	33.37	26.11
35.	7.71	32.44	25.33	110.	7.36	33.40	26.13
40.	7.65	32.61	25.47	115.	7.35	33.41	26.14
45.	7.56	32.82	25.65	120.	7.34	33.41	26.14
50.	7.57	32.93	25.73	125.	7.34	33.41	26.14
55.	7.57	33.02	25.80	130.	7.30	33.41	26.15
60.	7.55	33.13	25.89	135.	7.30	33.41	26.15
65.	7.49	33.28	26.02	140.	7.30	33.42	26.15

REFERENCE NO. 73- 7-278 STN- S2 DATE 17/ 4/73  
 POSITION 48-11.4N, 123-17.9W PST 23.7  
 RESULTS OF STD CAST 36 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.38	31.02	24.13	379.9	0.0	0.0	1479.
10	8.38	31.03	24.14	379.4	0.38	0.02	1479.
20	8.34	31.43	24.45	345.5	0.75	0.08	1480.
30	7.92	32.17	25.09	289.0	1.06	0.15	1479.
50	7.78	32.40	25.29	269.9	1.62	0.38	1479.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.38	31.02	24.13	40.	7.25	32.27	25.18
5.	8.38	31.02	24.13	45.	7.80	32.34	25.24
10.	8.38	31.03	24.14	50.	7.78	32.40	25.29
15.	8.40	31.08	24.17	55.	7.77	32.49	25.36
20.	8.34	31.43	24.45	60.	7.77	32.54	25.40
25.	8.06	32.12	25.03	65.	7.69	32.73	25.56
30.	7.92	32.17	25.09	70.	7.57	32.91	25.72



REFERENCE NO. 73-7-279 STN- 53 DATE 18/ 4/73  
 POSITION 48-14.2N, 123-18.0W PST 0.0  
 RESULTS OF STD CAST 52 POINTS TAKEN FROM ANALOG TRACE

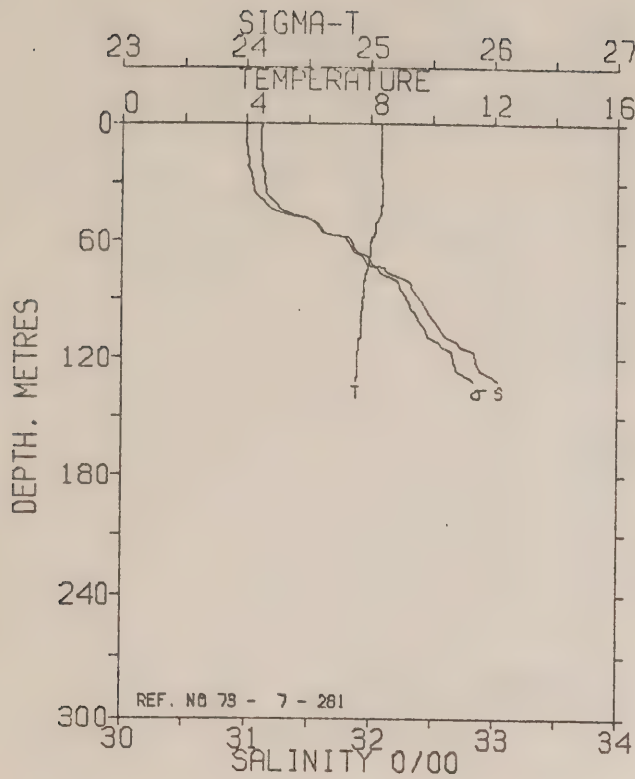
DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA σ	POT EN	SOUND VEL
0	8.33	31.36	24.40	353.8	0.0	0.0	1479.
10	8.33	31.36	24.40	354.4	0.35	0.02	1480.
20	8.12	31.67	24.67	329.1	0.70	0.07	1479.
30	7.98	31.84	24.82	314.2	1.02	0.15	1479.
50	7.85	32.14	25.07	290.6	1.64	0.40	1479.
75	7.70	32.47	25.35	264.4	2.32	0.84	1480.
100	7.57	32.75	25.59	242.1	2.95	1.40	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.33	31.36	24.40	60.	7.75	32.25	25.25
5.	8.33	31.36	24.40	65.	7.73	32.40	25.30
10.	8.33	31.36	24.40	70.	7.72	32.44	25.33
15.	8.32	31.37	24.41	75.	7.70	32.47	25.35
20.	8.12	31.67	24.67	80.	7.71	32.48	25.37
25.	8.00	31.82	24.81	85.	7.64	32.61	25.48
30.	7.98	31.84	24.82	90.	7.59	32.69	25.55
35.	7.97	31.87	24.85	95.	7.58	32.72	25.57
40.	7.94	31.91	24.88	100.	7.57	32.75	25.59
45.	7.93	31.97	24.93	105.	7.53	32.81	25.65
50.	7.85	32.14	25.07	110.	7.45	32.95	25.77

REFERENCE NO. 73-7-280 STN- 54 DATE 18/ 4/73  
 POSITION 48-17.2N, 123-18.0W PST 0.5  
 RESULTS OF STD CAST 31 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA σ	POT EN	SOUND VEL
0	8.23	31.31	24.37	356.6	0.0	0.0	1479.
10	8.23	31.32	24.38	355.7	0.36	0.02	1479.
20	8.22	31.33	24.39	355.3	0.71	0.07	1479.
30	8.20	31.34	24.40	354.5	1.07	0.16	1479.
50	8.19	31.38	24.43	351.9	1.77	0.45	1480.
75	7.69	32.48	25.37	263.0	2.56	0.95	1480.

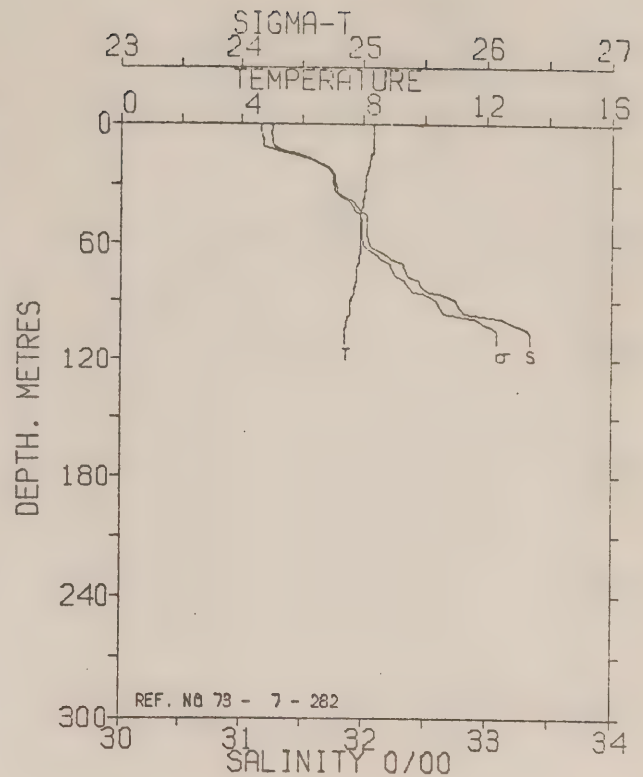
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.23	31.31	24.37	40.	8.20	31.36	24.41
5.	8.23	31.32	24.38	45.	8.20	31.38	24.43
10.	8.23	31.32	24.38	50.	8.19	31.38	24.43
15.	8.22	31.33	24.39	55.	8.17	31.38	24.44
20.	8.23	31.32	24.38	60.	8.09	31.58	24.60
25.	8.23	31.34	24.40	65.	7.91	31.59	24.95
30.	8.20	31.34	24.40	70.	7.79	32.36	25.26
35.	8.20	31.35	24.41	75.	7.65	32.48	25.37



REFERENCE NO. 73-7-281 STN- S5 DATE 18/ 4/73  
 POSITION 48-14.4N, 123-9.0W PST 1.1  
 RESULTS OF STD CAST 63 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.34	31.00	24.12	380.8	0.0	0.0	1479.
10	8.34	31.00	24.12	381.3	0.38	0.02	1479.
20	8.35	31.01	24.12	381.0	0.76	0.08	1479.
30	8.36	31.05	24.15	378.5	1.14	0.17	1480.
50	8.18	31.54	24.56	336.8	1.88	0.47	1480.
75	7.86	32.12	25.06	292.2	2.67	0.97	1480.
100	7.70	32.50	25.38	262.3	3.35	1.58	1480.
125	7.58	32.87	25.69	233.4	3.97	2.29	1481.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.34	31.00	24.12	70.	7.93	31.99	24.95
5.	8.34	31.00	24.12	75.	7.86	32.12	25.06
10.	8.34	31.00	24.12	80.	7.80	32.29	25.20
15.	8.35	31.01	24.12	85.	7.77	32.34	25.25
20.	8.35	31.01	24.12	90.	7.74	32.39	25.29
25.	8.36	31.03	24.14	95.	7.74	32.45	25.34
30.	8.36	31.05	24.15	100.	7.70	32.50	25.38
35.	8.37	31.06	24.16	105.	7.68	32.56	25.43
40.	8.37	31.14	24.22	110.	7.64	32.64	25.50
45.	8.32	31.25	24.31	115.	7.61	32.76	25.60
50.	8.18	31.54	24.56	120.	7.58	32.64	25.67
55.	8.12	31.60	24.62	125.	7.58	32.87	25.69
60.	8.01	31.85	24.82	130.	7.52	33.00	25.79

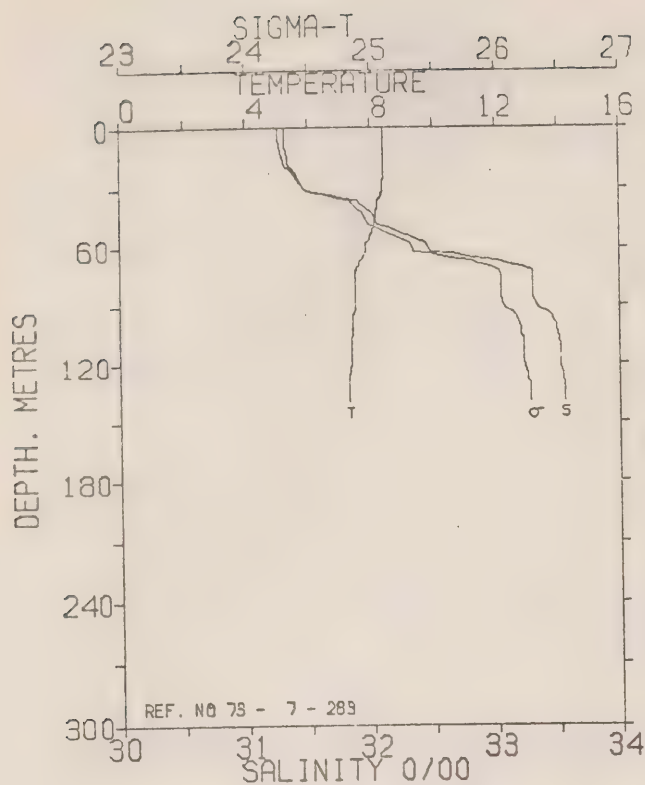


REFERENCE NO. 73-7-282 STN- S3 DATE 18/ 4/73  
 POSITION 48-14.2N, 123-18.0W PST 1.6  
 RESULTS OF STD CAST 68 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.32	31.16	24.24	368.6	0.0	0.0	1479.
10	8.33	31.18	24.26	368.0	0.37	0.02	1479.
20	8.17	31.67	24.66	325.7	0.72	0.07	1480.
30	8.09	31.77	24.75	320.8	1.04	0.15	1480.
50	7.91	32.04	24.99	298.8	1.66	0.41	1480.
75	7.78	32.35	25.25	274.3	2.35	0.87	1480.
100	7.44	33.18	25.95	208.4	3.01	1.42	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.32	31.16	24.24	60.	7.91	32.04	24.99
5.	8.33	31.17	24.25	65.	7.90	32.17	25.10
10.	8.33	31.18	24.26	70.	7.83	32.28	25.19
15.	8.26	31.43	24.46	75.	7.78	32.35	25.25
20.	8.17	31.67	24.66	80.	7.74	32.45	25.34
25.	8.09	31.77	24.75	85.	7.71	32.53	25.40
30.	8.09	31.77	24.75	90.	7.58	32.75	25.59
35.	8.06	31.81	24.79	95.	7.44	32.81	25.64
40.	7.96	31.93	24.89	100.	7.44	33.18	25.95
45.	7.92	32.02	24.97	105.	7.42	33.34	26.08
50.	7.91	32.04	24.99	110.	7.41	33.35	26.09



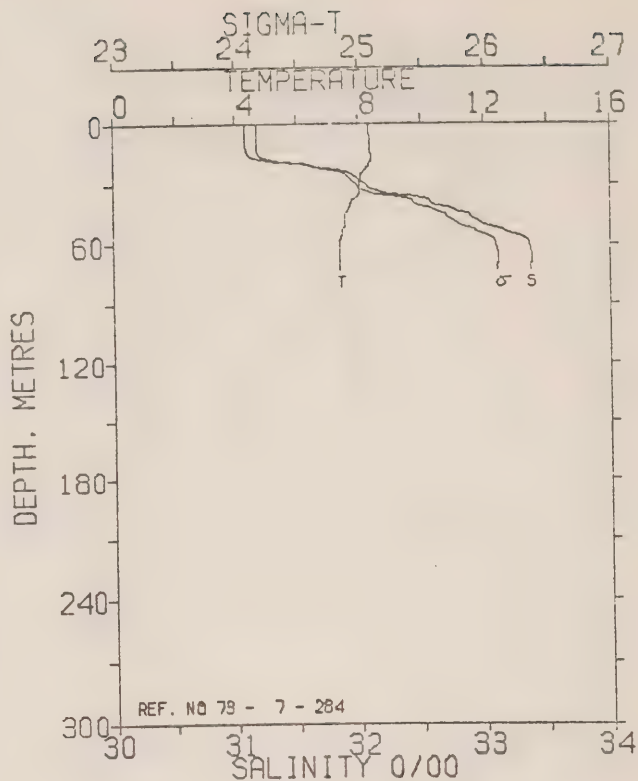


REFERENCE NO. 73- 7-283 STN- S1 DATE 18/ 4/73  
 POSITION 48-14.2N, 123-26.8W PST 2.2  
 RESULTS OF STD CAST 65 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA II	POT EN	SOUND VEL
0	8.40	31.26	24.31	362.3	0.0	0.0	1480.
10	8.39	31.27	24.32	361.9	0.36	0.02	1480.
20	8.41	31.34	24.37	357.2	0.72	0.07	1480.
30	8.38	31.46	24.47	348.1	1.08	0.16	1480.
50	8.05	32.17	25.07	291.1	1.70	0.42	1480.
75	7.47	33.30	26.04	199.3	2.32	0.80	1480.
100	7.40	33.49	26.20	184.7	2.81	1.24	1480.
125	7.29	33.54	26.25	179.9	3.26	1.76	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.40	31.26	24.31	70.	7.51	33.21	25.97
5.	8.39	31.26	24.31	75.	7.47	33.20	26.04
10.	8.39	31.27	24.32	80.	7.47	33.30	26.04
15.	8.40	31.29	24.33	85.	7.47	33.30	26.04
20.	8.41	31.34	24.37	90.	7.46	33.33	26.07
25.	8.39	31.40	24.42	95.	7.42	33.45	26.17
30.	8.38	31.46	24.47	100.	7.40	33.49	26.20
35.	8.25	31.78	24.74	105.	7.38	33.50	26.21
40.	8.18	31.95	24.88	110.	7.35	33.52	26.23
45.	8.13	32.03	24.95	115.	7.35	33.52	26.23
50.	8.05	32.17	25.07	120.	7.32	33.52	26.23
55.	7.94	32.35	25.23	125.	7.29	33.54	26.25
60.	7.84	32.47	25.33	130.	7.26	33.56	26.27
65.	7.69	32.82	25.64	135.	7.26	33.56	26.27

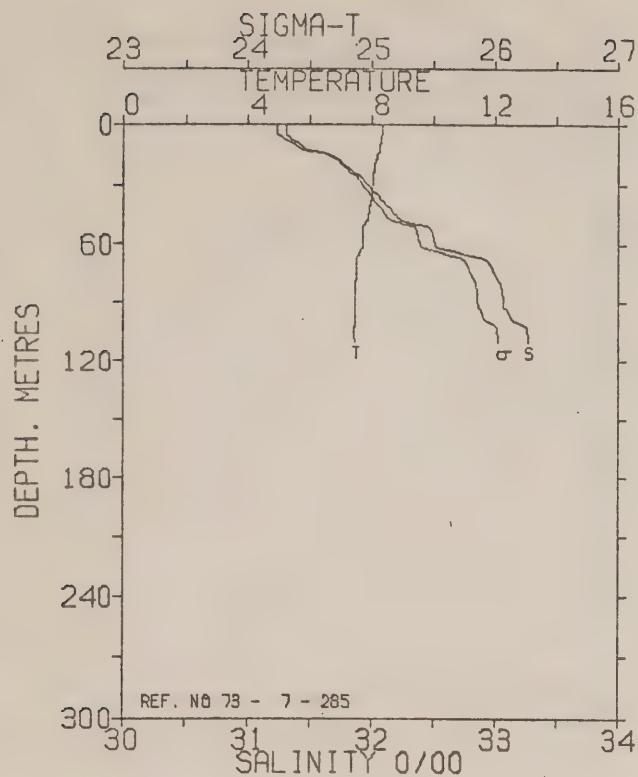


REFERENCE NO. 73- 7-284 STN- S2 DATE 18/ 4/73  
 POSITION 48-11.4N, 123-17.9W PST 2.9  
 RESULTS OF STD CAST 41 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA II	POT EN	SOUND VEL
0	8.36	31.07	24.17	375.9	0.0	0.0	1479.
10	8.37	31.08	24.17	375.7	0.38	0.02	1479.
20	8.34	31.54	24.54	341.3	0.75	0.08	1480.
30	8.05	32.06	24.98	298.8	1.06	0.16	1480.
50	7.54	33.00	25.79	222.4	1.57	0.26	1479.

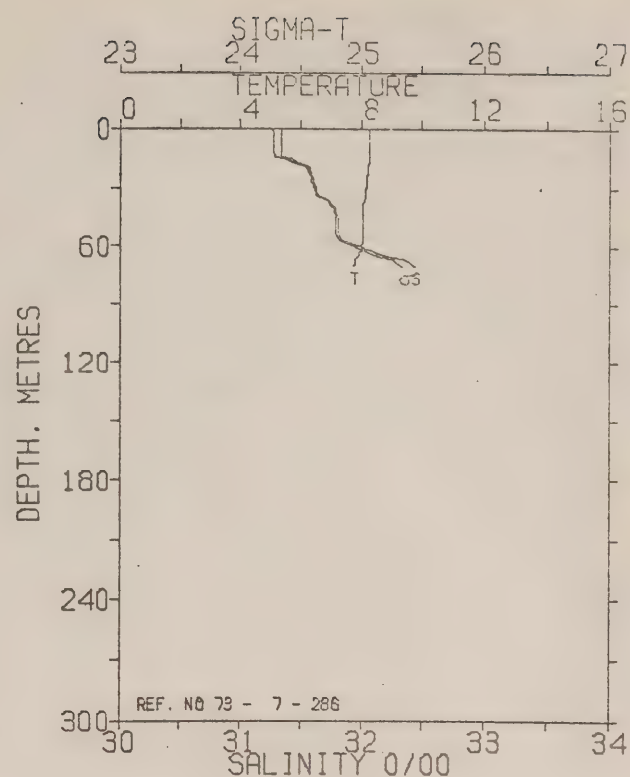
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.36	31.07	24.17	40.	7.74	32.59	25.44
5.	8.36	31.08	24.18	45.	7.58	32.88	25.69
10.	8.37	31.08	24.17	50.	7.54	33.00	25.79
15.	8.39	31.10	24.19	55.	7.45	33.23	25.98
20.	8.34	31.54	24.54	60.	7.42	33.37	26.10
25.	8.09	31.95	24.89	65.	7.42	33.38	26.11
30.	8.05	32.06	24.98	70.	7.41	33.37	26.11



REFERENCE NO. 73- 7-285 STN- 53 DATE 18/ 4/73  
 POSITION 48-14.2N, 123-18.0W PST 3.4  
 RESULTS OF STD CAST 61 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.33	31.23	24.30	363.6	0.0	0.0	1479.
10	8.28	31.37	24.41	352.9	0.36	0.02	1479.
20	8.08	31.77	24.76	320.5	0.70	0.07	1479.
30	8.02	31.97	24.92	305.2	1.01	0.15	1480.
50	7.74	32.37	25.27	272.0	1.59	0.39	1479.
75	7.45	32.99	25.80	222.0	2.21	0.78	1479.
100	7.43	33.17	25.94	208.6	2.75	1.26	1480.

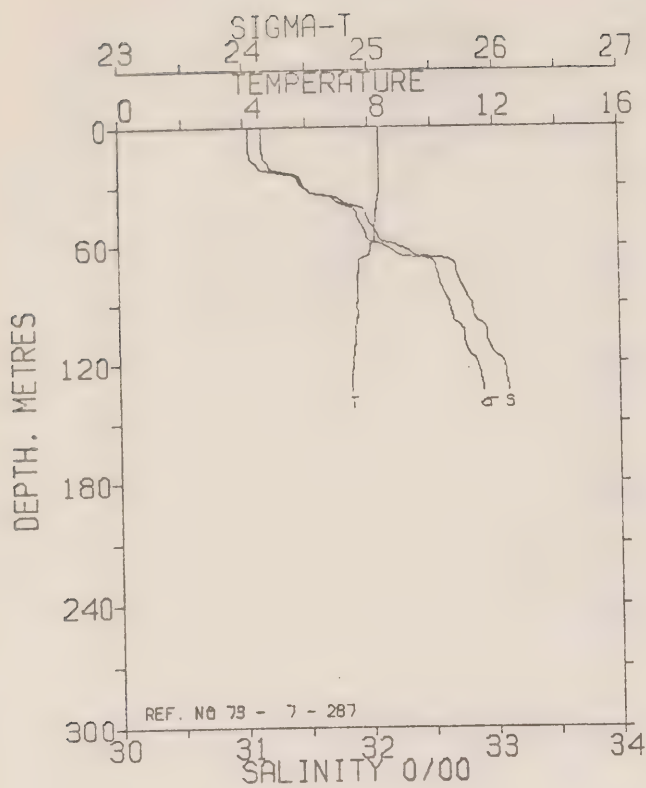
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.33	31.23	24.30	60.	7.70	32.51	25.38
5.	8.31	31.23	24.30	65.	7.55	32.74	25.59
10.	8.28	31.37	24.41	70.	7.47	32.94	25.76
15.	8.16	31.64	24.64	75.	7.45	32.69	25.80
20.	8.08	31.77	24.76	80.	7.45	33.04	25.84
25.	8.03	31.89	24.86	85.	7.45	33.05	25.85
30.	8.02	31.97	24.92	90.	7.44	33.06	25.86
35.	7.98	32.04	24.98	95.	7.44	33.11	25.89
40.	7.94	32.10	25.04	100.	7.43	33.17	25.94
45.	7.87	32.19	25.11	105.	7.42	33.26	26.02
50.	7.74	32.37	25.27	110.	7.43	33.27	26.02



REFERENCE NO. 73- 7-286 STN- 54 DATE 18/ 4/73  
 POSITION 48-17.2N, 123-18.0W PST 3.8  
 RESULTS OF STD CAST 43 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.27	31.26	24.33	360.5	0.0	0.0	1479.
10	8.28	31.27	24.34	360.4	0.36	0.02	1479.
20	8.18	31.56	24.57	338.0	0.71	0.07	1479.
30	8.14	31.61	24.62	333.6	1.05	0.16	1480.
50	8.04	31.81	24.79	317.8	1.69	0.42	1480.

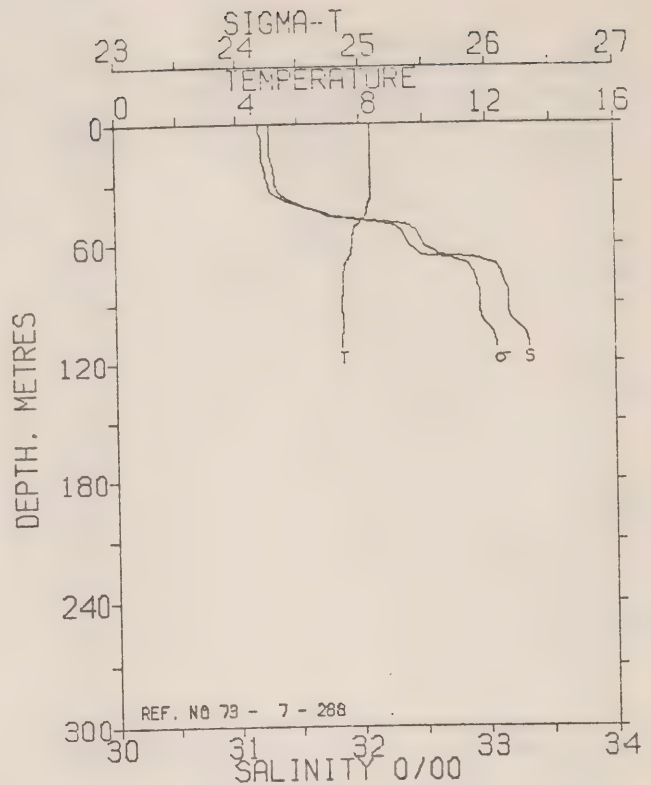
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.27	31.26	24.33	40.	8.05	31.77	24.76
5.	8.27	31.27	24.34	45.	8.04	31.80	24.78
10.	8.28	31.26	24.33	50.	8.04	31.81	24.79
15.	8.28	31.38	24.42	55.	8.04	31.82	24.80
20.	8.18	31.56	24.57	60.	7.98	32.02	24.96
25.	8.17	31.58	24.60	65.	7.87	32.20	25.12
30.	8.14	31.61	24.62	70.	7.73	32.42	25.32



REFERENCE NO. 73- 7-289 STN- S1 DATE 18/ 4/73  
 POSITION 48-14.2N, 123-26.8W PST 5.9  
 RESULTS OF STD CAST 72 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	POT EN	SOUND VEL
0	8.14	31.71	24.70	325.2	0.0	0.0	1479.
10	8.08	31.80	24.78	318.1	0.32	0.02	1479.
20	7.93	32.07	25.01	296.2	0.63	0.06	1479.
30	7.87	32.19	25.12	286.3	0.92	0.14	1479.
50	7.81	32.74	25.55	245.4	1.47	0.36	1480.
75	7.67	33.24	25.97	206.0	2.02	0.71	1481.
100	7.51	33.45	26.15	188.8	2.52	1.15	1481.
125	7.36	33.53	26.23	181.5	2.98	1.68	1481.

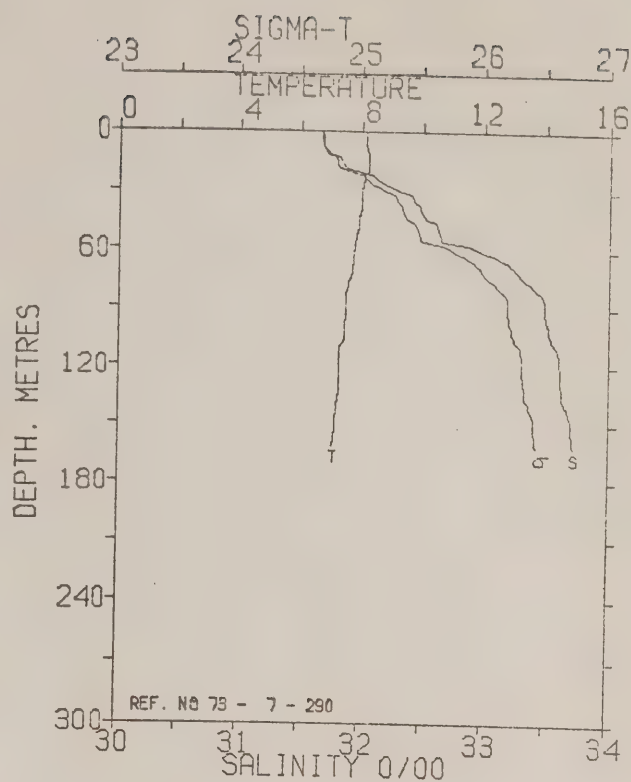
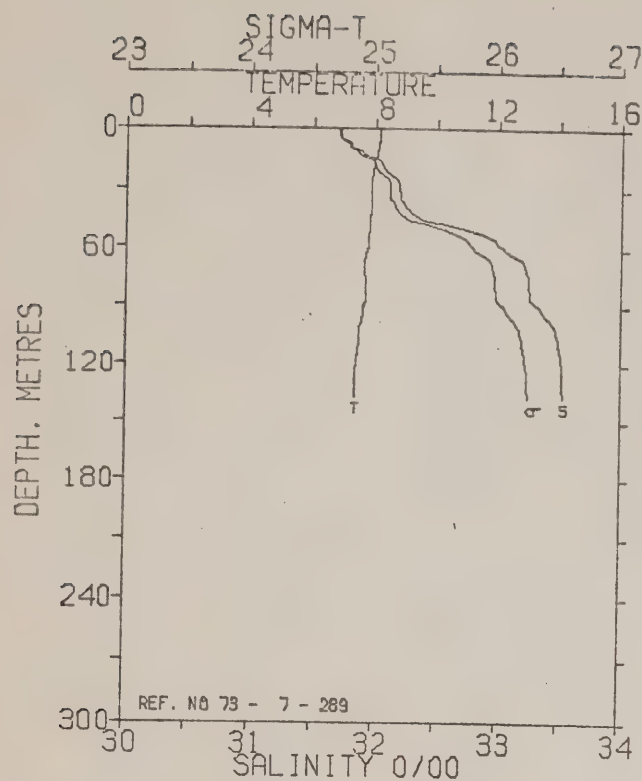
DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.14	31.71	24.70	70.	7.66	33.22	25.95
5.	8.13	31.72	24.71	75.	7.67	33.24	25.97
10.	8.08	31.80	24.78	80.	7.68	33.24	25.97
15.	7.95	32.01	24.96	85.	7.68	33.26	25.98
20.	7.93	32.07	25.01	90.	7.63	33.33	26.04
25.	7.87	32.17	25.10	95.	7.58	33.39	26.10
30.	7.87	32.19	25.12	100.	7.51	33.45	26.15
35.	7.87	32.20	25.12	105.	7.47	33.48	26.18
40.	7.86	32.27	25.18	110.	7.47	33.49	26.19
45.	7.84	32.36	25.25	115.	7.42	33.51	26.21
50.	7.81	32.74	25.55	120.	7.38	33.52	26.22
55.	7.78	32.97	25.73	125.	7.36	33.53	26.23
60.	7.74	33.05	25.80	130.	7.35	33.53	26.23
65.	7.66	33.18	25.92	135.	7.34	33.53	26.24



REFERENCE NO. 73- 7-290 STN- JF6 DATE 18/ 4/73  
 POSITION 48-14.5N, 123-34.7W PST 6.7  
 RESULTS OF STD CAST 92 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA	PCT EN	SOUND VEL
0	8.13	31.66	24.66	328.8	0.0	0.0	1479.
10	8.16	31.71	24.70	325.9	0.33	0.02	1479.
20	8.18	31.96	24.85	307.5	0.65	0.07	1480.
30	7.98	32.30	25.18	280.0	0.94	0.14	1480.
50	7.87	32.63	25.45	254.4	1.47	0.26	1480.
75	7.63	33.32	26.03	195.7	2.03	0.71	1481.
100	7.43	33.52	26.22	182.6	2.50	1.13	1480.
125	7.27	33.62	26.32	173.7	2.94	1.63	1480.
150	7.11	33.70	26.41	165.5	3.37	2.23	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.13	31.66	24.66	85.	7.47	33.48	26.18
5.	8.14	31.67	24.67	90.	7.47	33.49	26.19
10.	8.16	31.71	24.70	95.	7.45	33.50	26.20
15.	8.20	31.03	24.79	100.	7.43	33.52	26.22
20.	8.18	31.96	24.89	105.	7.43	33.54	26.24
25.	8.06	32.14	25.05	110.	7.29	33.59	26.29
30.	7.98	32.30	25.18	115.	7.27	33.61	26.31
35.	7.97	32.43	25.25	120.	7.27	33.61	26.31
40.	7.96	32.48	25.33	125.	7.27	33.62	26.32
45.	7.93	32.53	25.37	130.	7.26	33.62	26.32
50.	7.87	32.63	25.45	135.	7.23	33.63	26.33
55.	7.80	32.65	25.48	140.	7.19	33.66	26.36
60.	7.75	32.96	25.73	145.	7.12	33.68	26.39
65.	7.73	33.15	25.89	150.	7.11	33.70	26.41
70.	7.68	33.24	25.97	155.	7.09	33.70	26.41
75.	7.63	33.32	26.03	160.	7.08	33.71	26.42



REFERENCE NO. 73- 7-287 STN- 55 DATE 18/ 4/73  
 POSITION 48-14.4N, 123- 9.0W PST 4.5  
 RESULTS OF STD CAST 71 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	POT EN	SOUND VEL
0	8.33	31.03	24.14	378.5	0.0	0.0	1479.
10	8.33	31.04	24.15	378.2	0.38	0.02	1479.
20	8.34	31.11	24.20	373.3	0.75	0.08	1479.
30	8.33	31.47	24.48	346.6	1.11	0.17	1480.
50	8.17	32.03	24.94	303.2	1.75	0.43	1481.
75	7.63	32.70	25.55	245.8	2.44	0.86	1480.
100	7.53	32.90	25.71	230.4	3.04	1.39	1480.
125	7.41	33.08	25.88	215.4	3.59	2.03	1480.

REFERENCE NO. 73- 7-288 STN- 53 DATE 18/ 4/73  
 POSITION 48-14.2N, 123-18.0W PST 5.2  
 RESULTS OF STD CAST 57 POINTS TAKEN FROM ANALOG TRACE

DEPTH	TEMP	SAL	SIGMA T	SVA	DELTA D	PCT EN	SOUND VEL
0	8.31	31.18	24.26	367.0	0.0	0.0	1479.
10	8.31	31.19	24.27	366.8	0.37	0.02	1479.
20	8.31	31.21	24.28	365.5	0.73	0.07	1480.
30	8.31	31.24	24.31	363.1	1.10	0.17	1480.
50	7.89	32.35	25.23	275.5	1.77	0.44	1480.
75	7.44	33.11	25.90	212.7	2.39	0.83	1480.
100	7.43	33.23	25.99	204.2	2.91	1.30	1480.

DEPTH	TEMP	SAL	SIGMA T	DEPTH	TEMP	SAL	SIGMA T
0.	8.33	31.03	24.14	70.	7.64	32.68	25.53
5.	8.33	31.04	24.15	75.	7.63	32.70	25.55
10.	8.33	31.04	24.15	80.	7.62	32.73	25.57
15.	8.33	31.05	24.15	85.	7.62	32.77	25.61
20.	8.34	31.11	24.20	90.	7.59	32.81	25.64
25.	8.33	31.42	24.44	95.	7.59	32.83	25.66
30.	8.33	31.47	24.48	100.	7.53	32.90	25.71
35.	8.30	31.75	24.71	105.	7.51	32.94	25.75
40.	8.26	31.90	24.83	110.	7.50	32.95	25.76
45.	8.20	31.98	24.90	115.	7.48	32.99	25.80
50.	8.17	32.03	24.94	120.	7.43	33.06	25.86
55.	8.17	32.08	24.98	125.	7.41	33.08	25.88
60.	8.04	32.24	25.12	130.	7.40	33.10	25.89

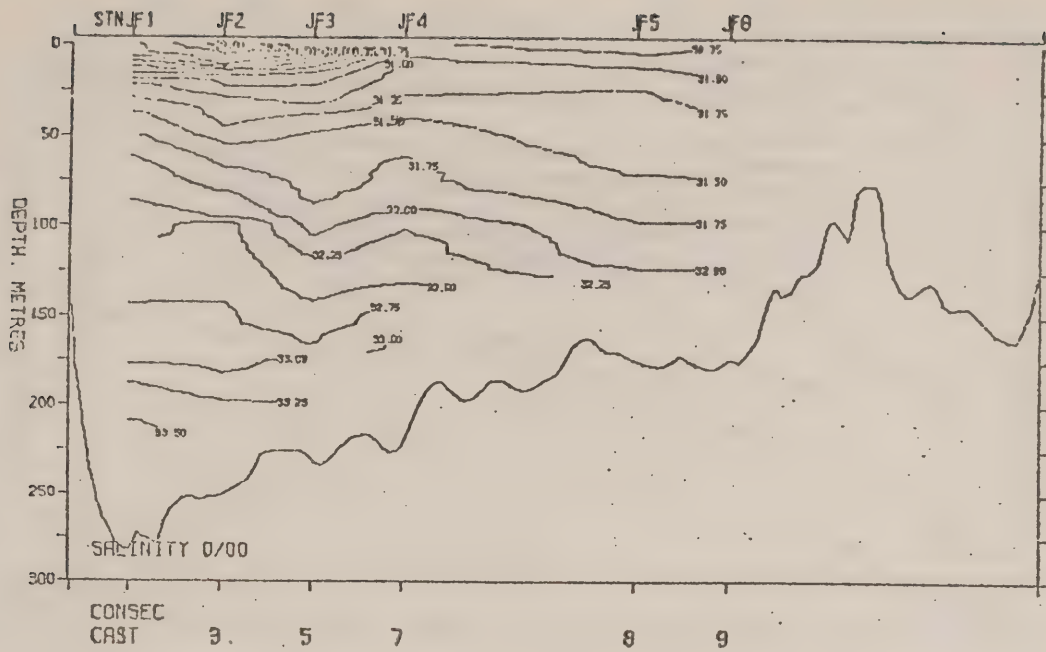
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5.	8.32	31.19	24.26	65.	7.68	32.61	25.47
10.	8.31	31.19	24.27	70.	7.49	33.07	25.86
15.	8.31	31.19	24.27	75.	7.44	33.11	25.90
20.	8.31	31.21	24.28	80.	7.44	33.15	25.93
25.	8.31	31.23	24.30	85.	7.43	33.17	25.95
30.	8.31	31.24	24.31	90.	7.43	33.17	25.95
35.	8.31	31.30	24.35	95.	7.43	33.18	25.95
40.	8.26	31.48	24.50	100.	7.43	33.23	25.99
45.	8.16	31.74	24.72	105.	7.42	33.31	26.05
50.	7.89	32.35	25.23	110.	7.41	33.33	26.07



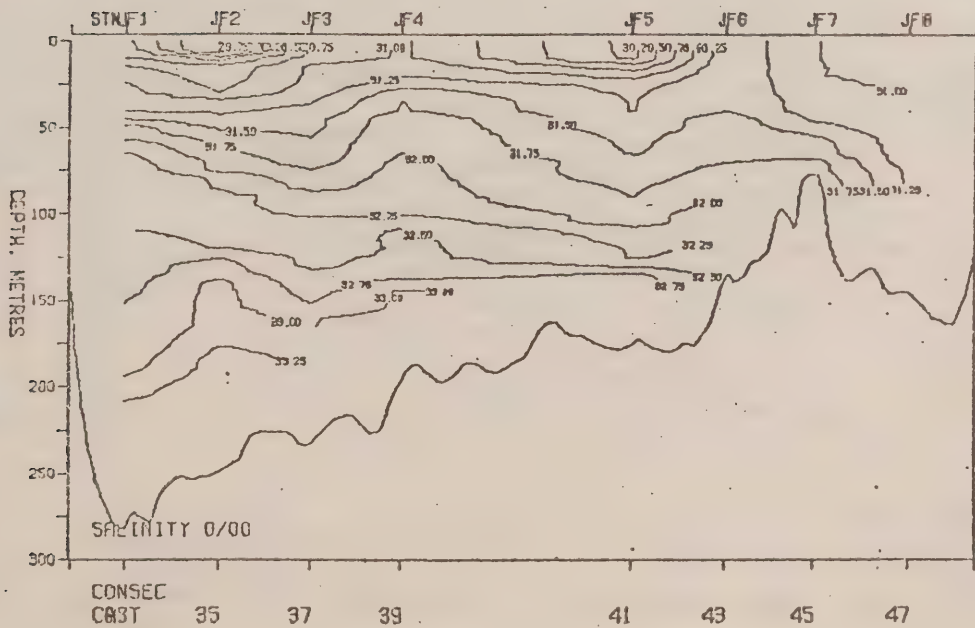


CROSS-SECTIONS OF SALINITY CONTOURS



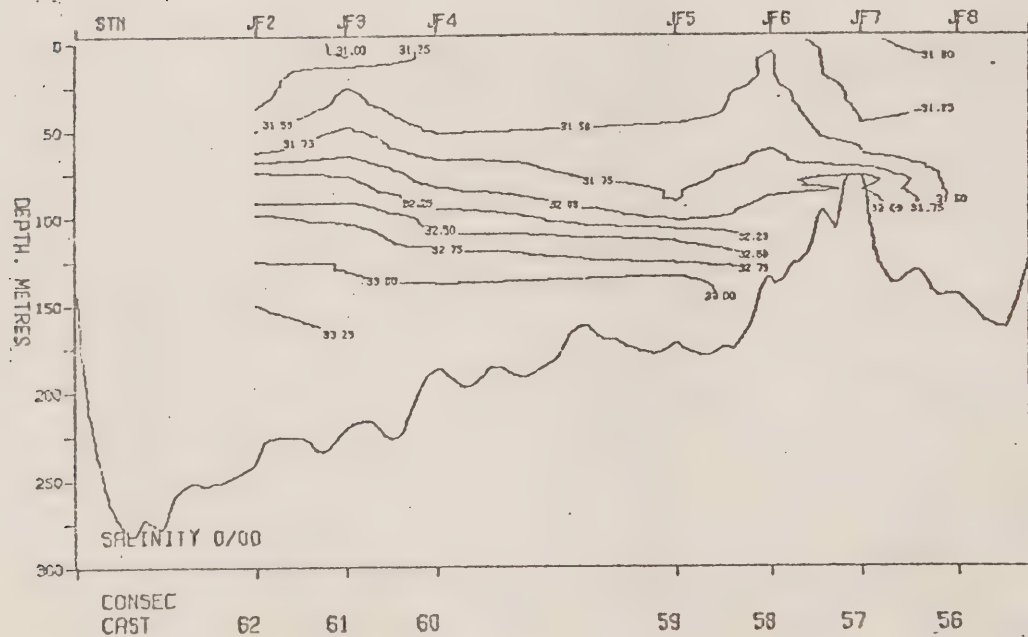
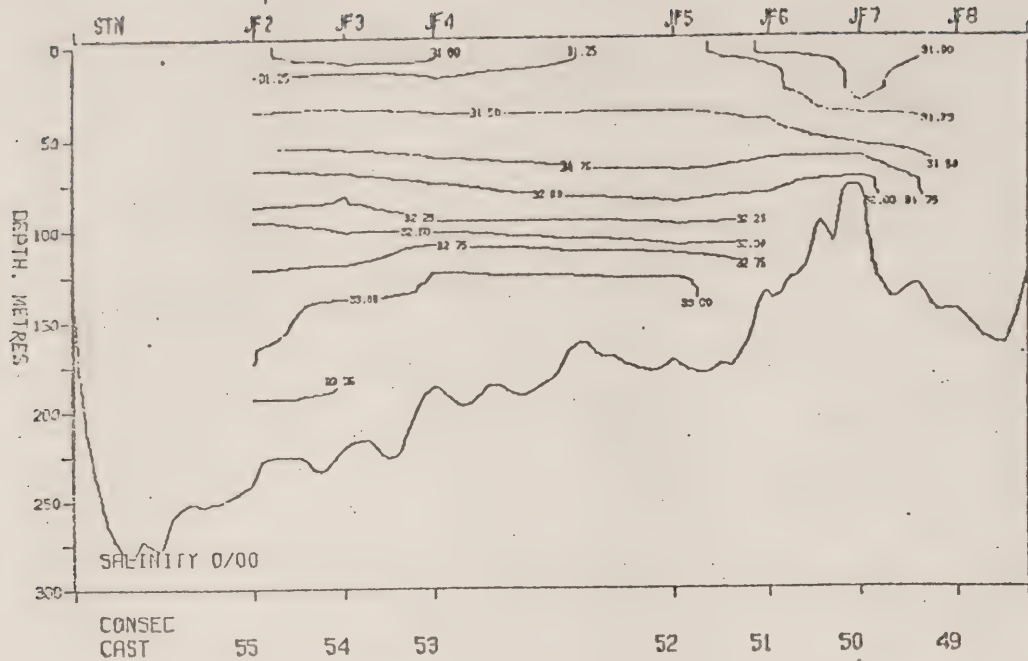


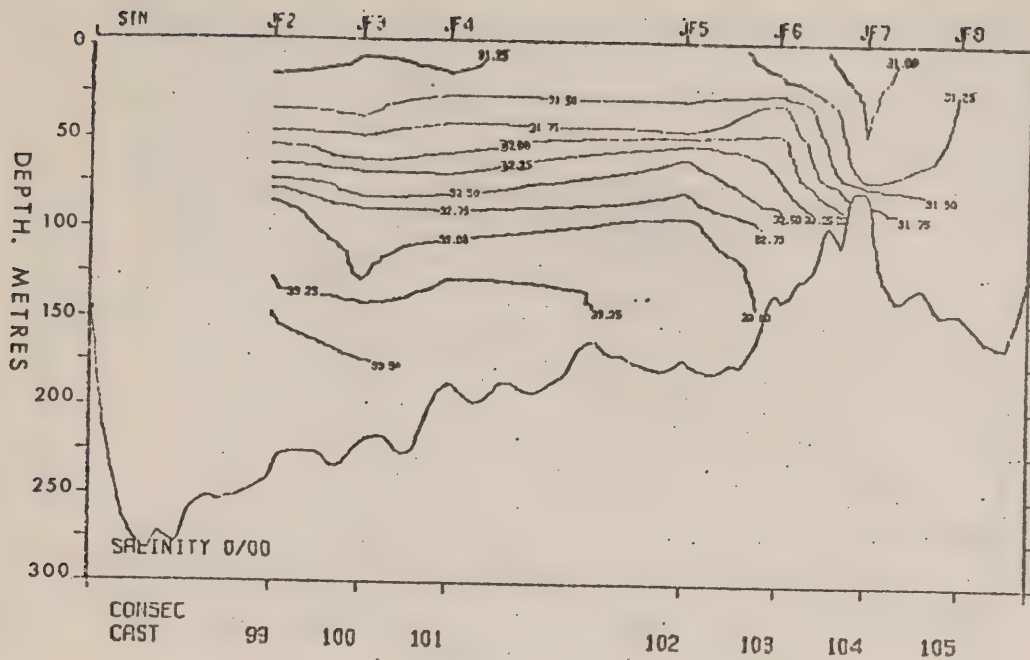
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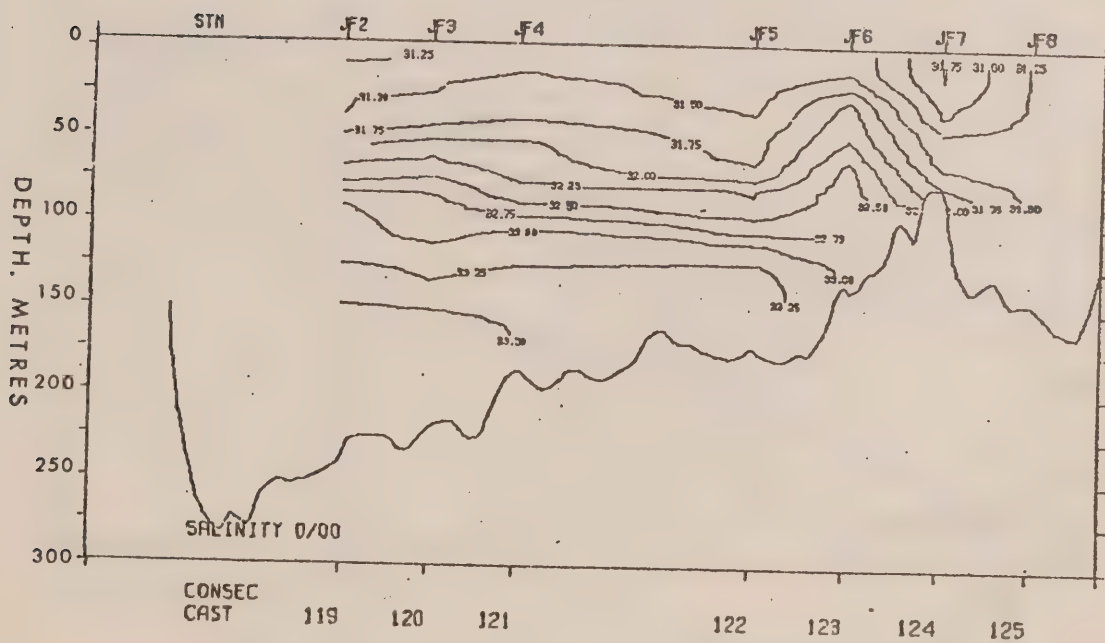
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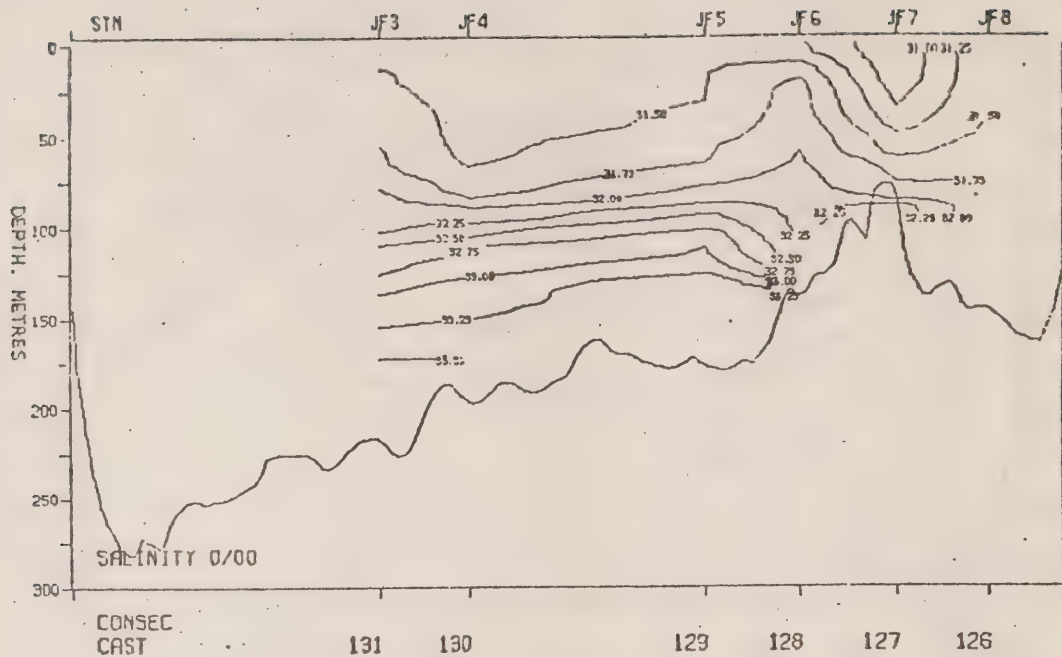




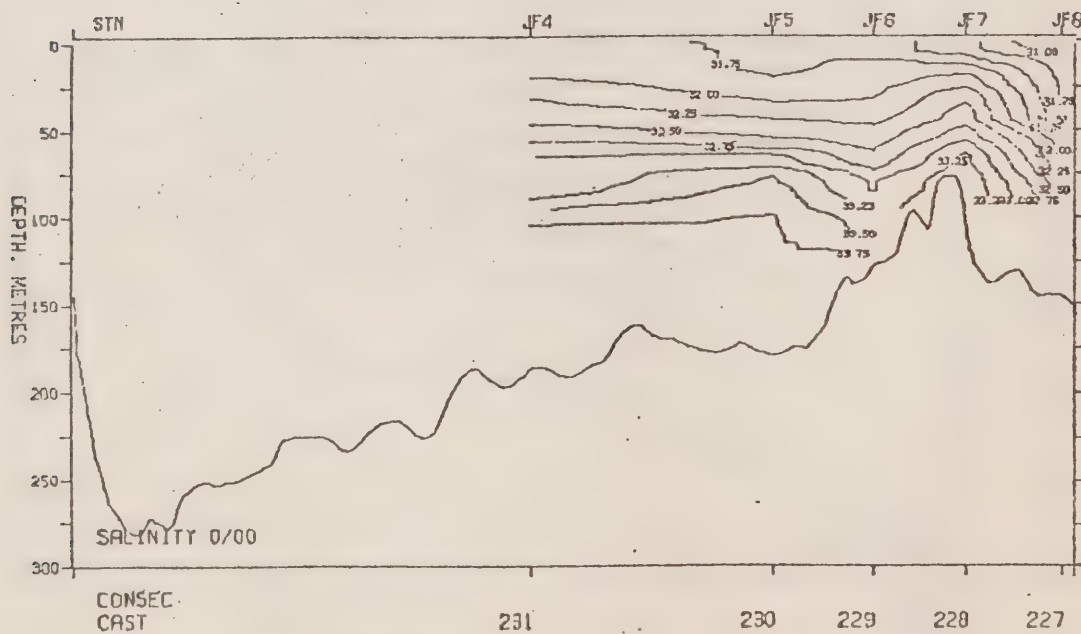
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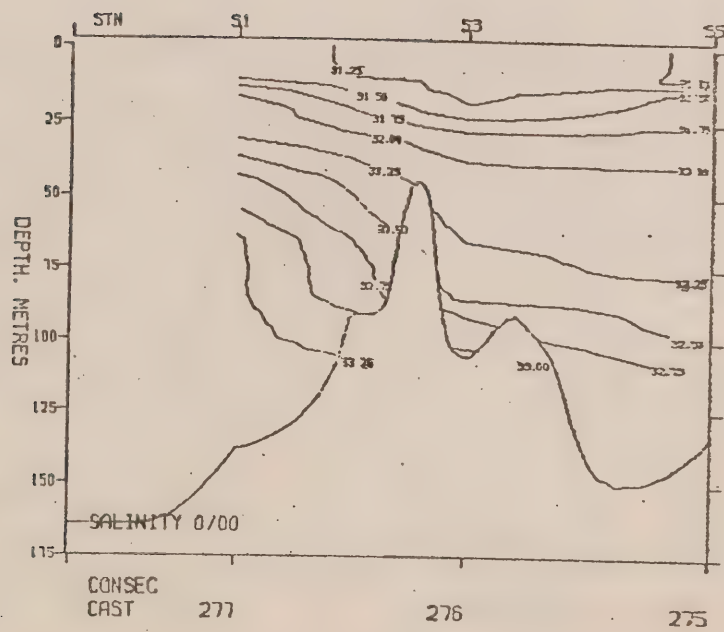
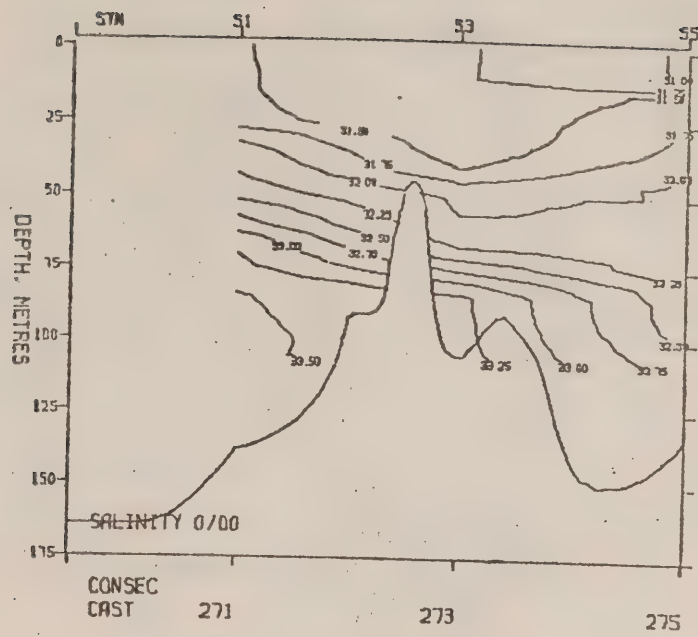
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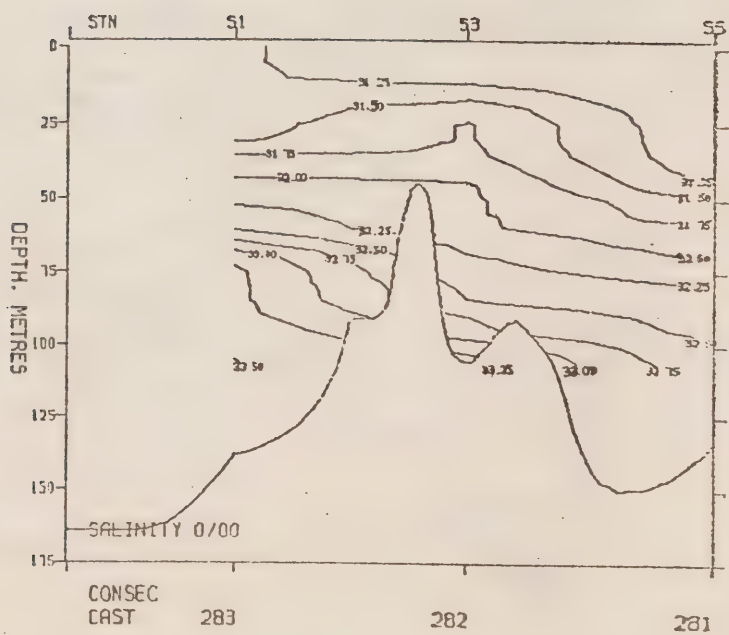
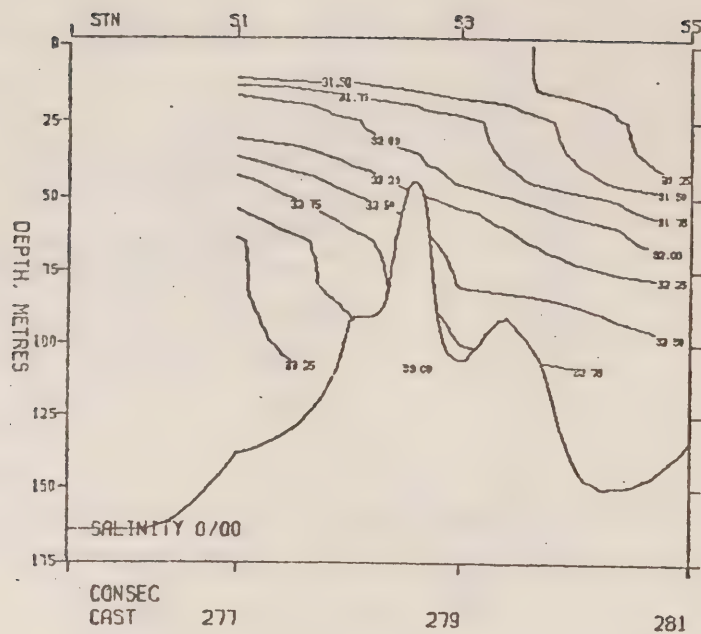
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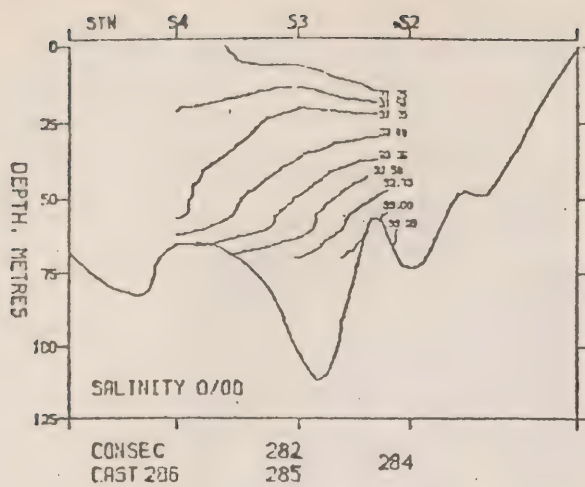
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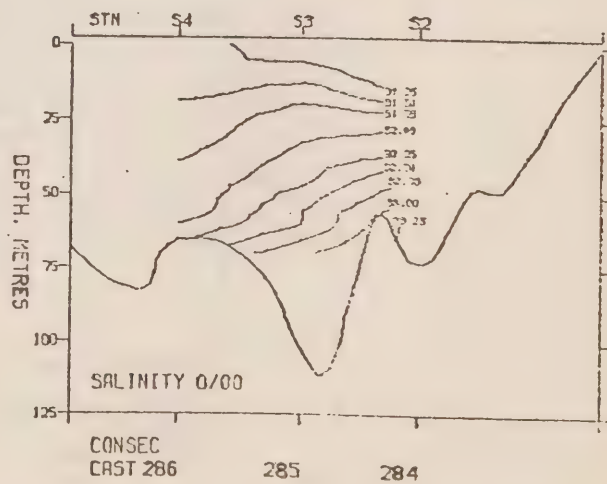
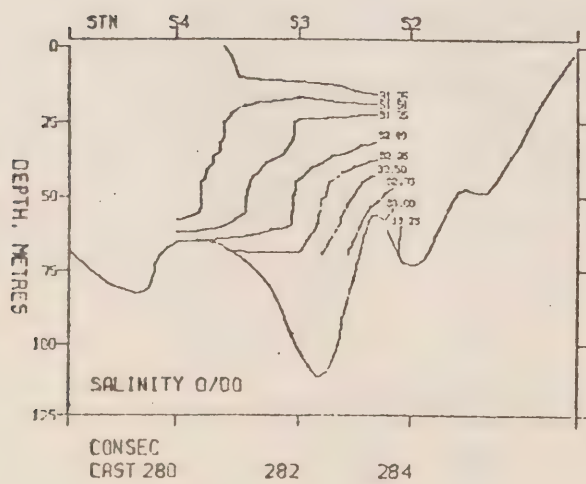
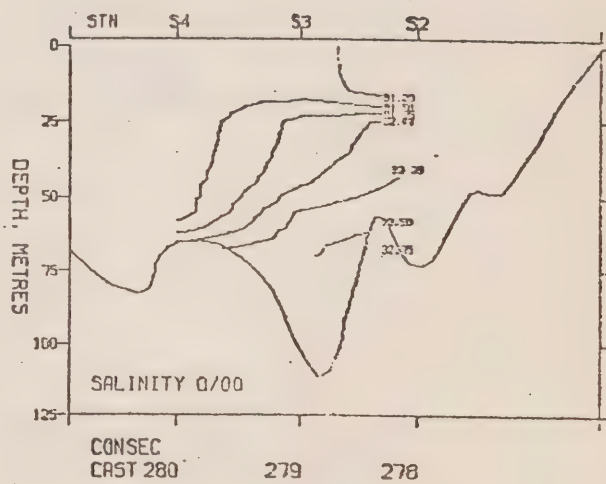
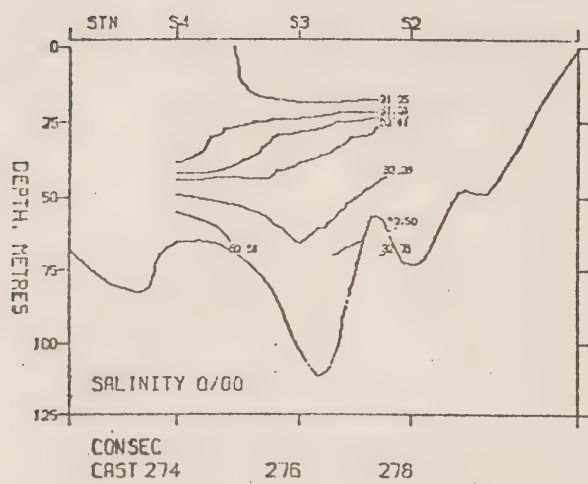
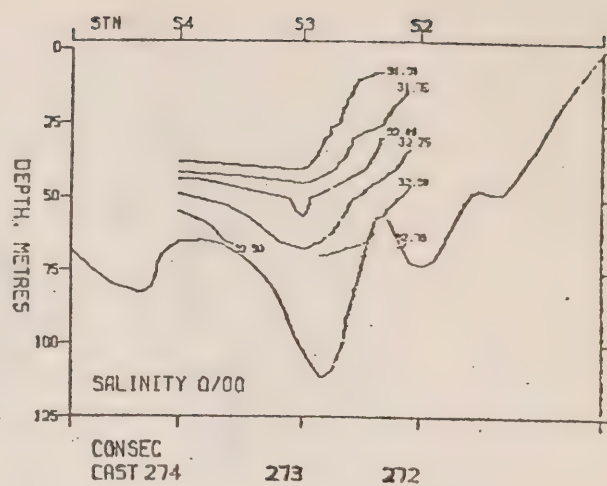


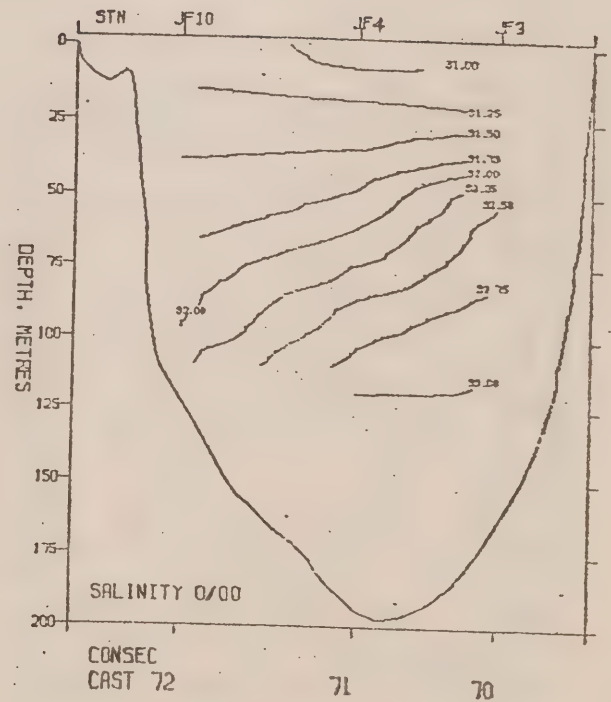
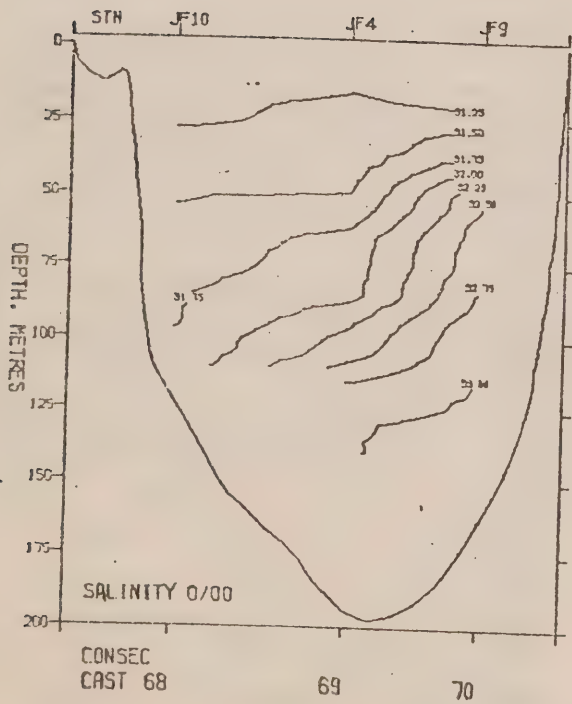
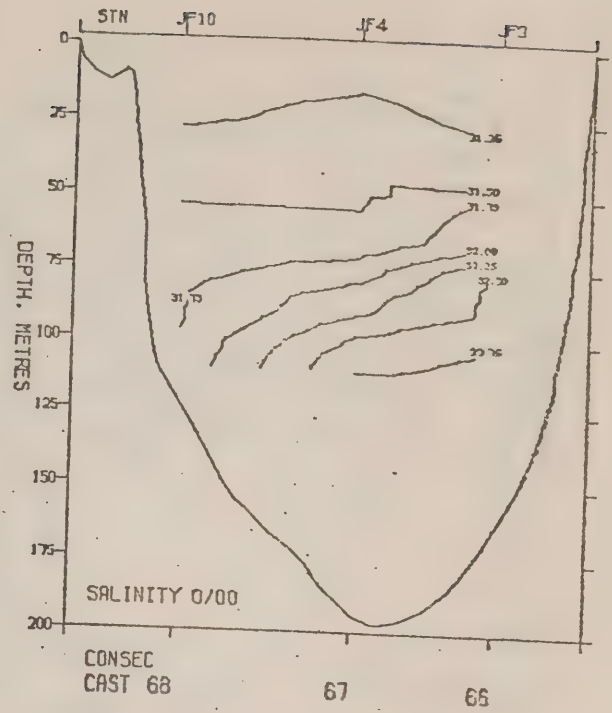
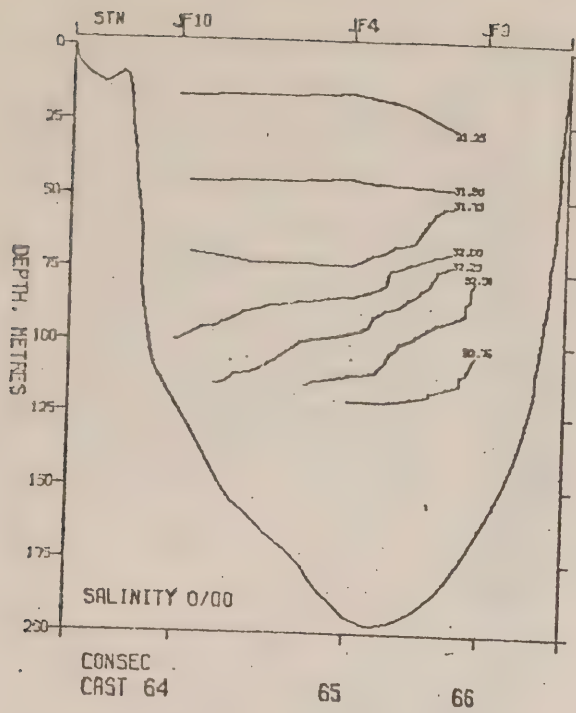




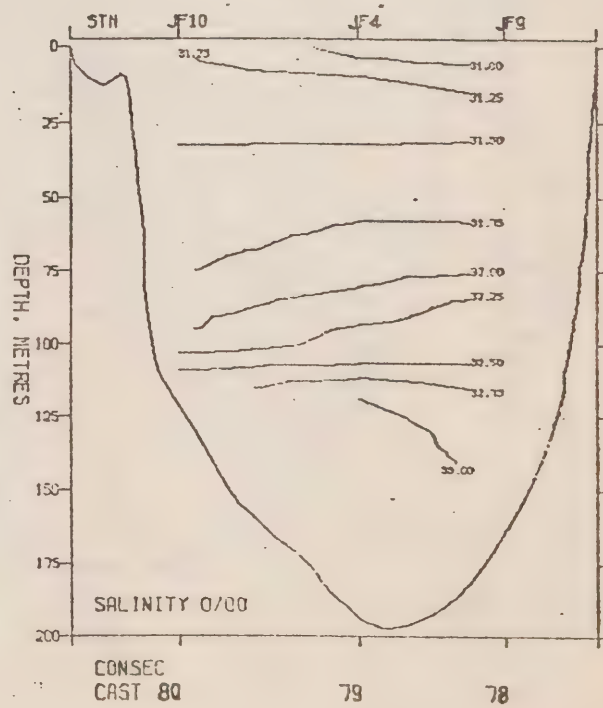
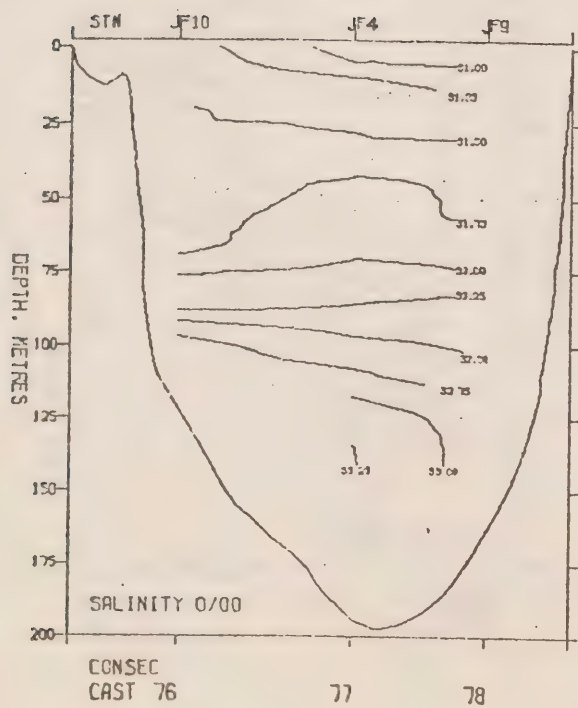
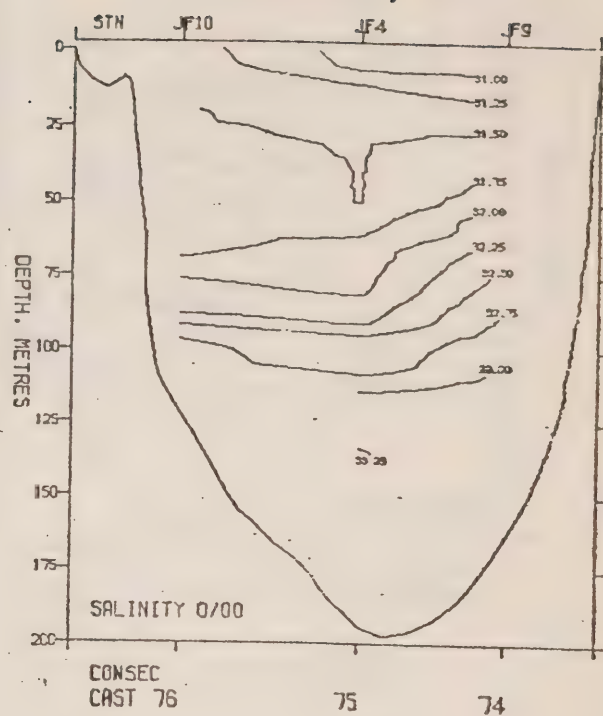
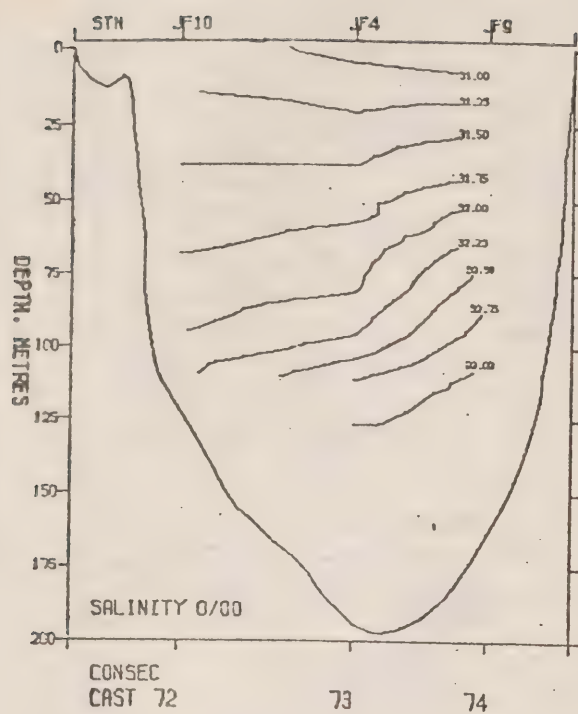


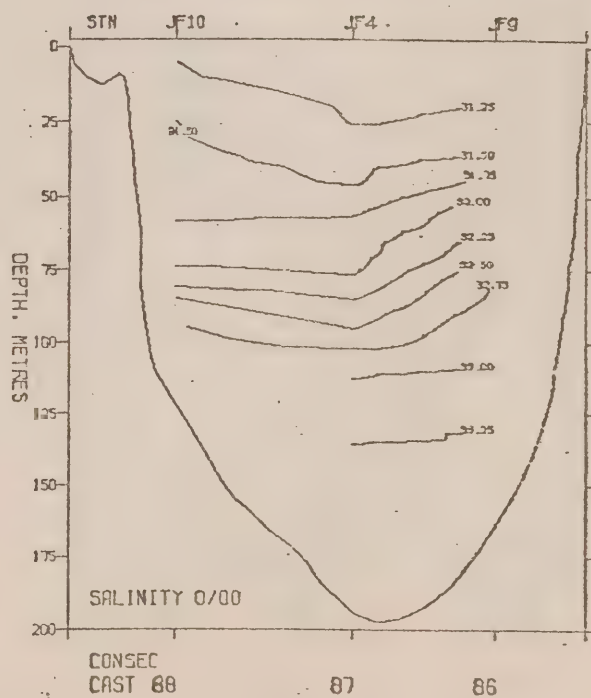
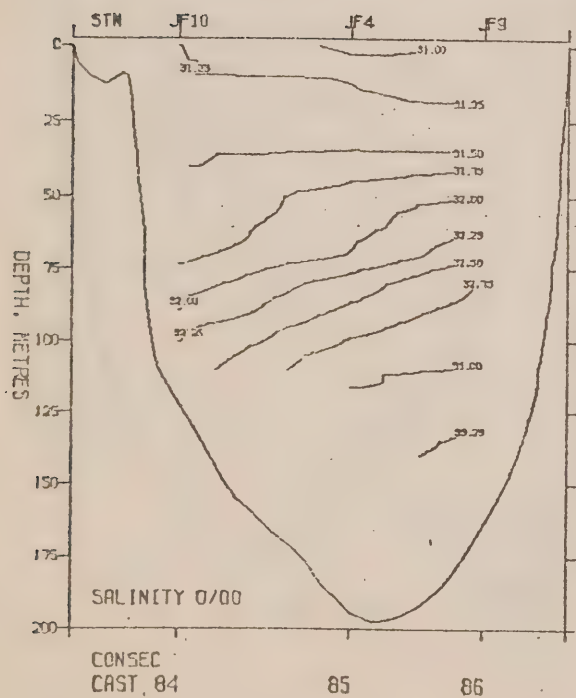
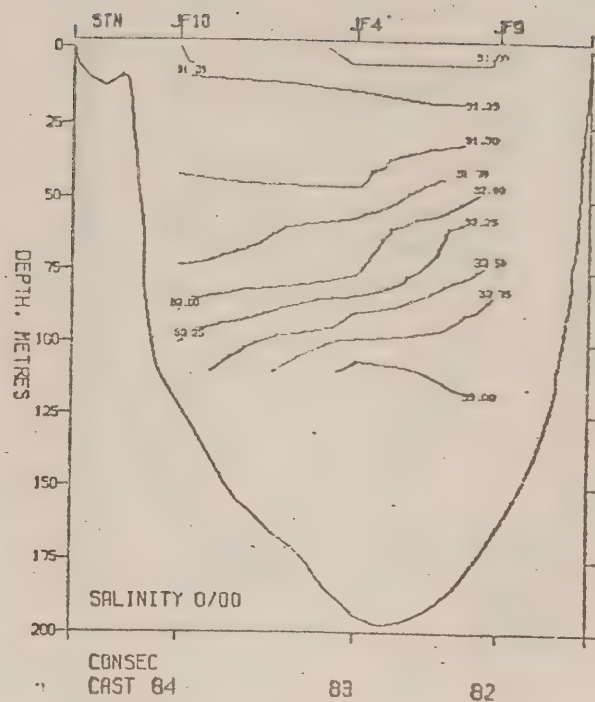
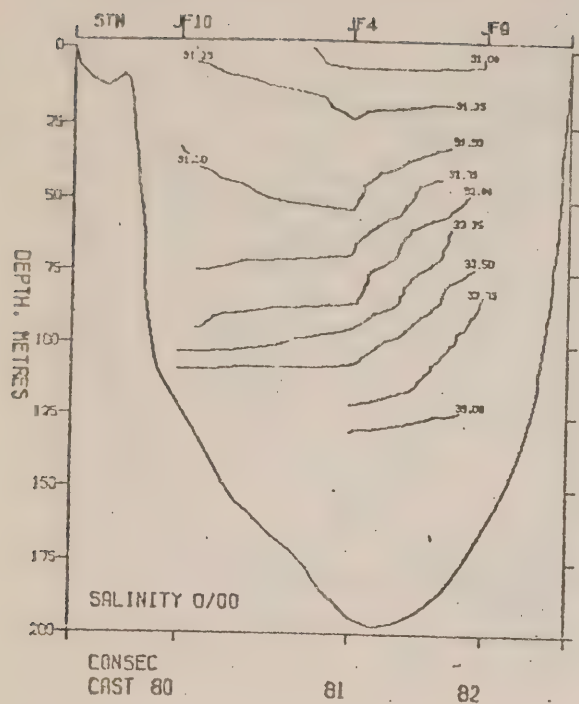
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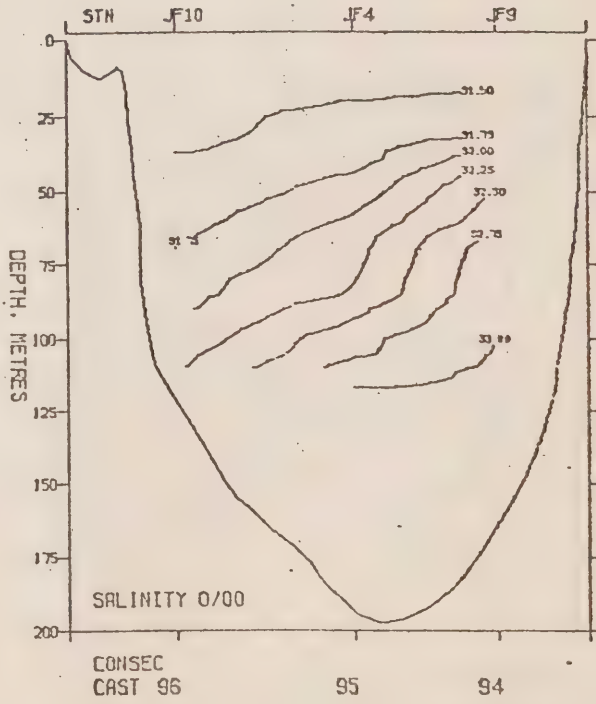
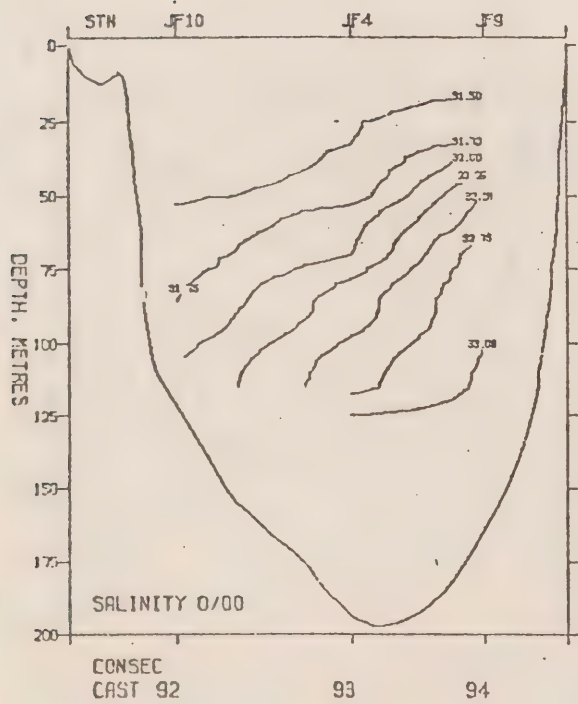
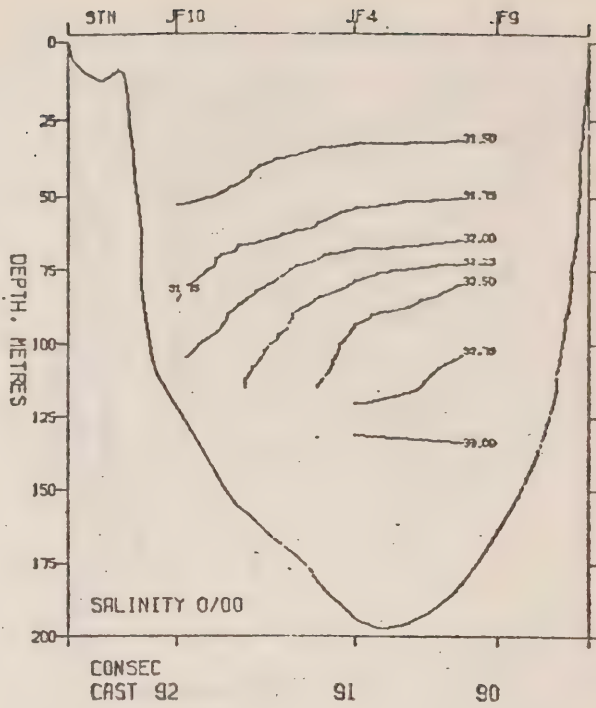
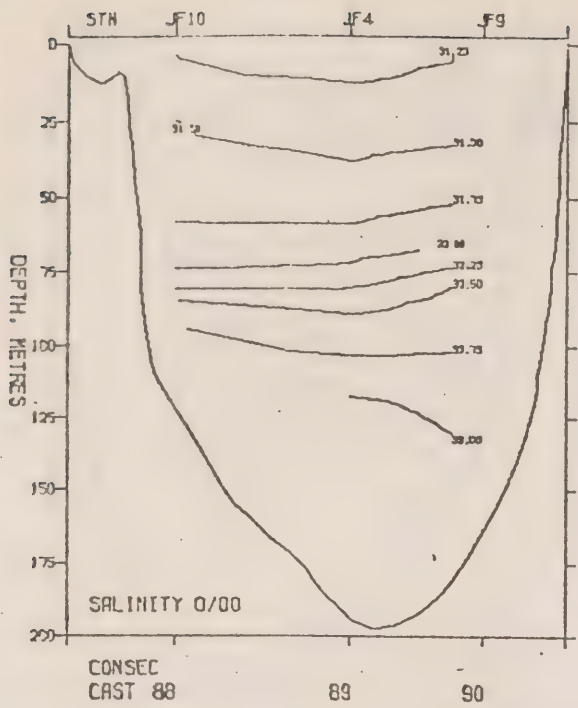


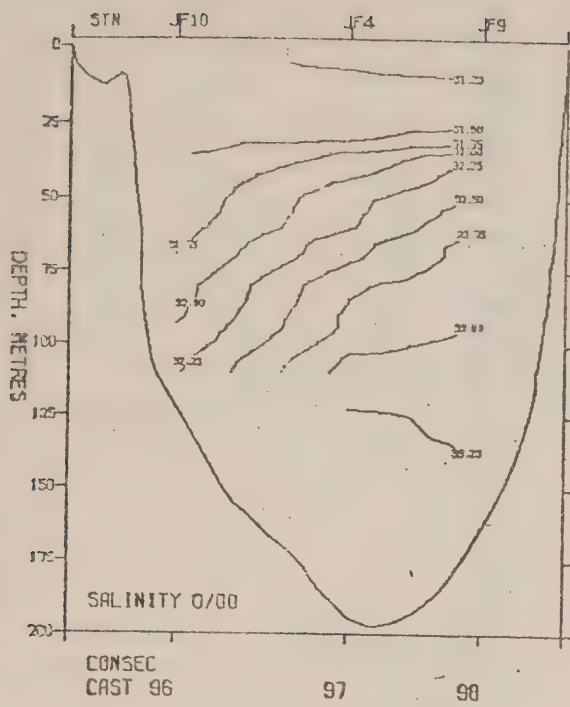




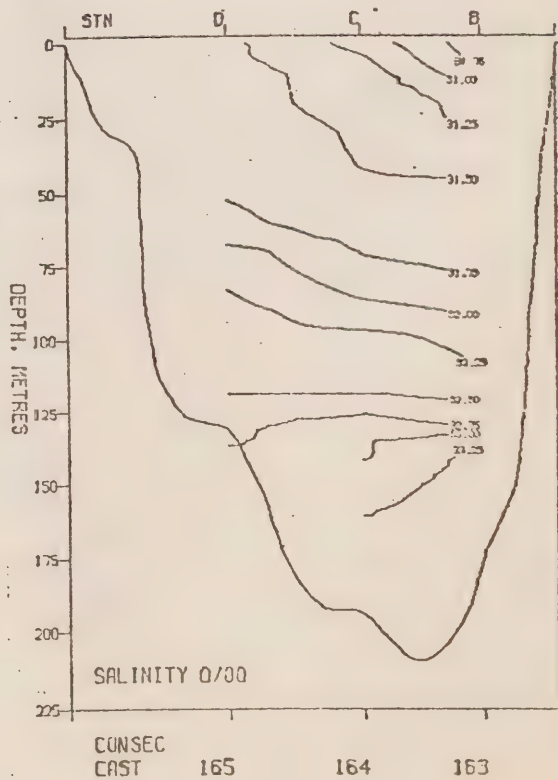
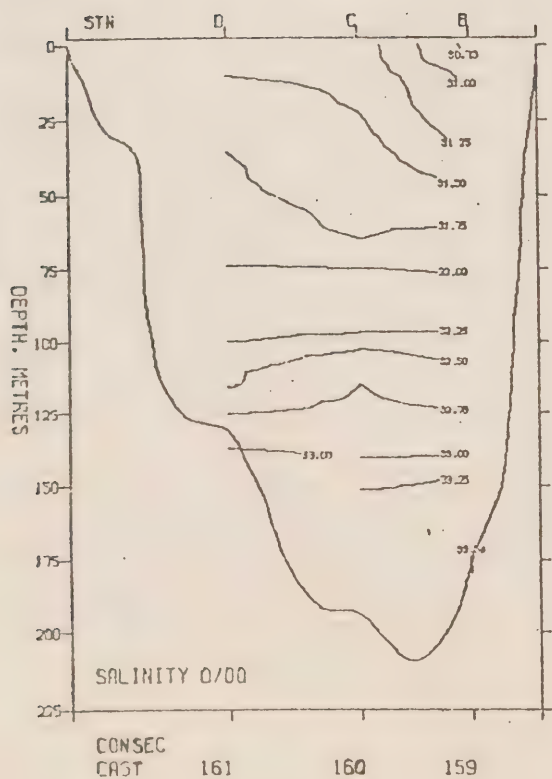
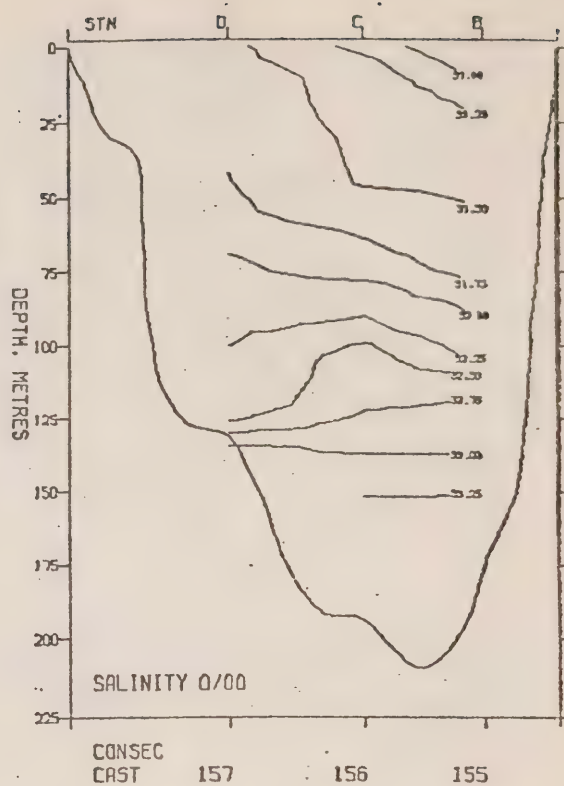
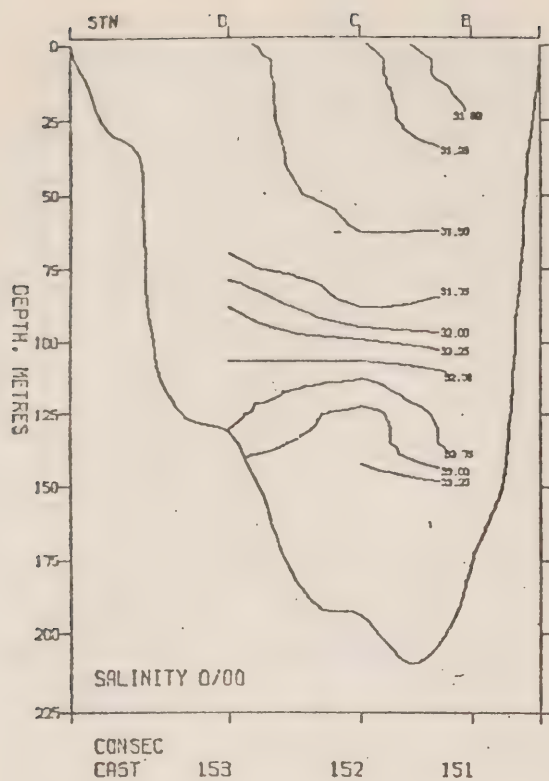


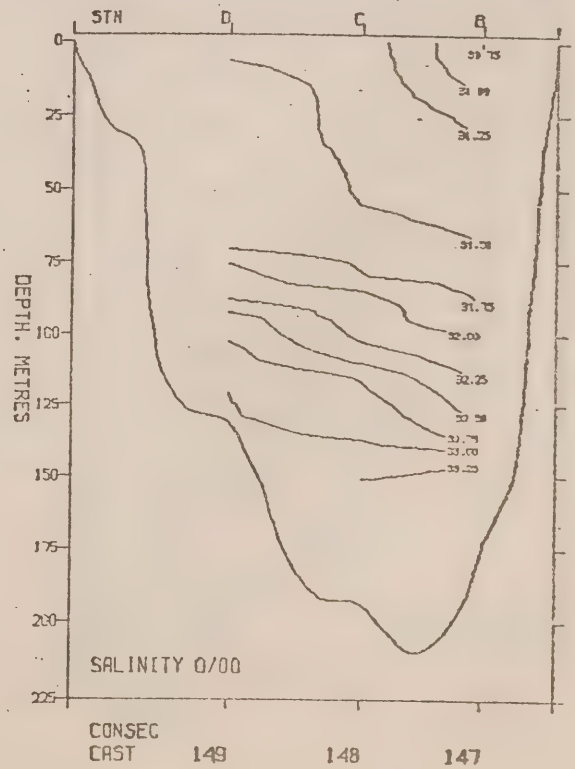
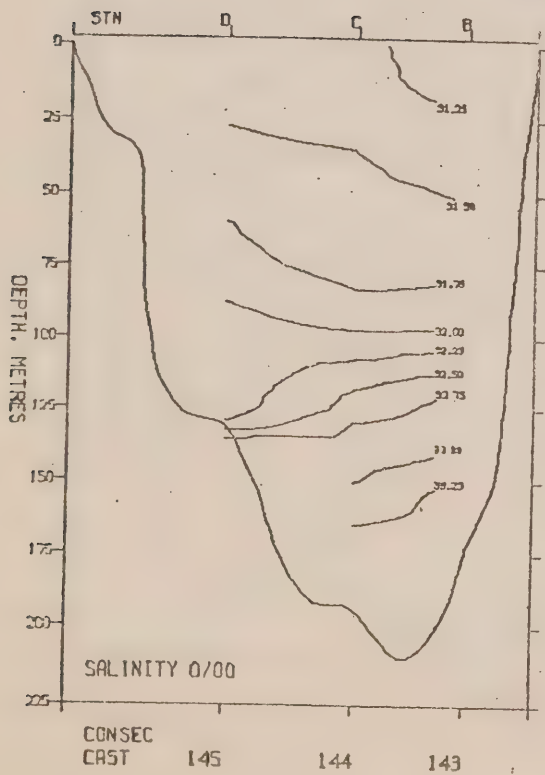
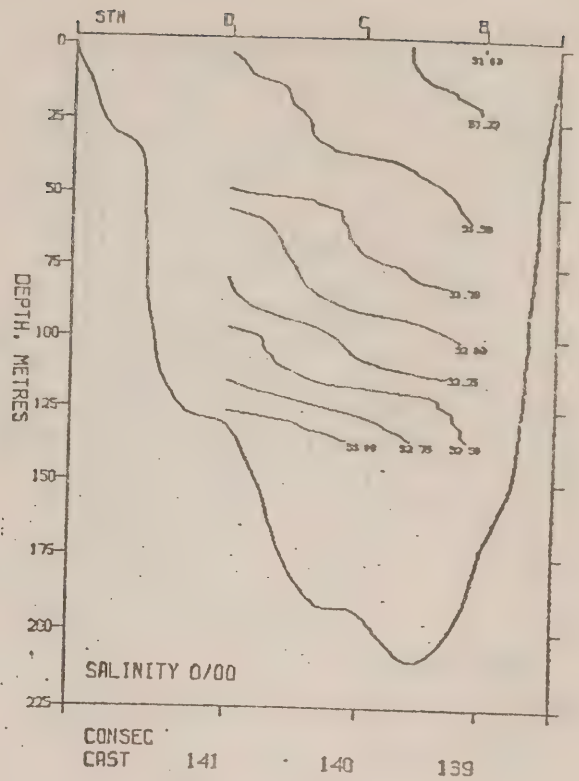
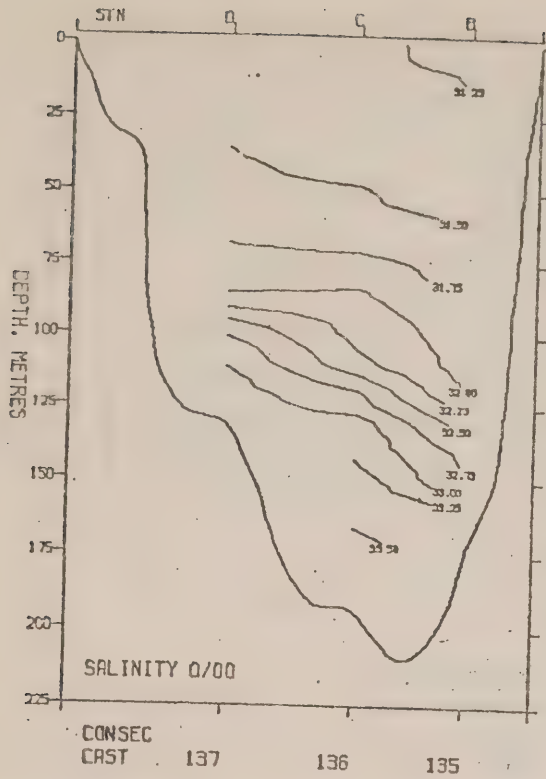


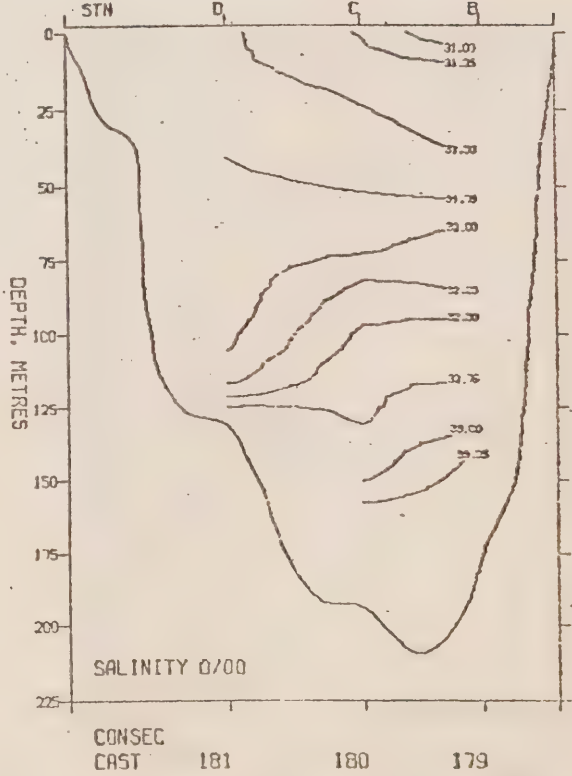
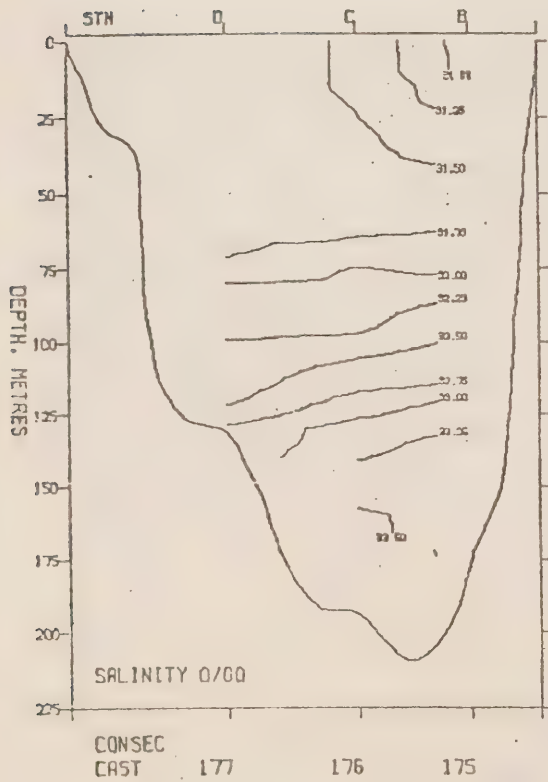
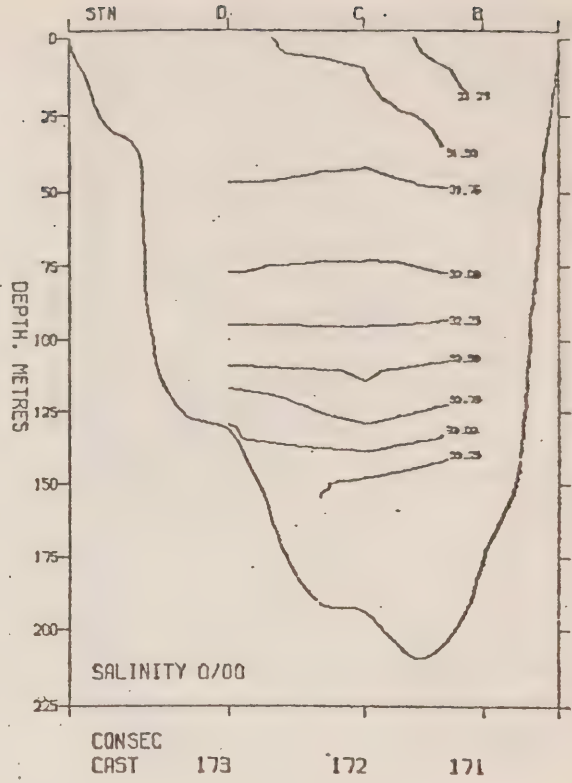
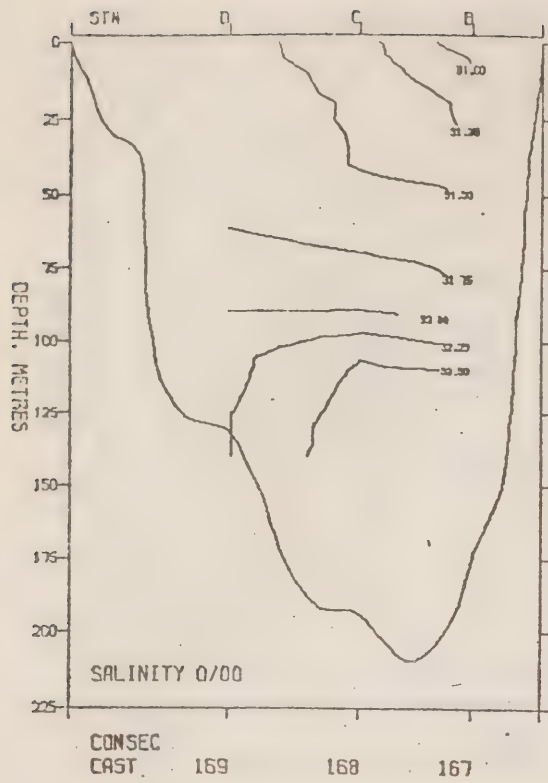


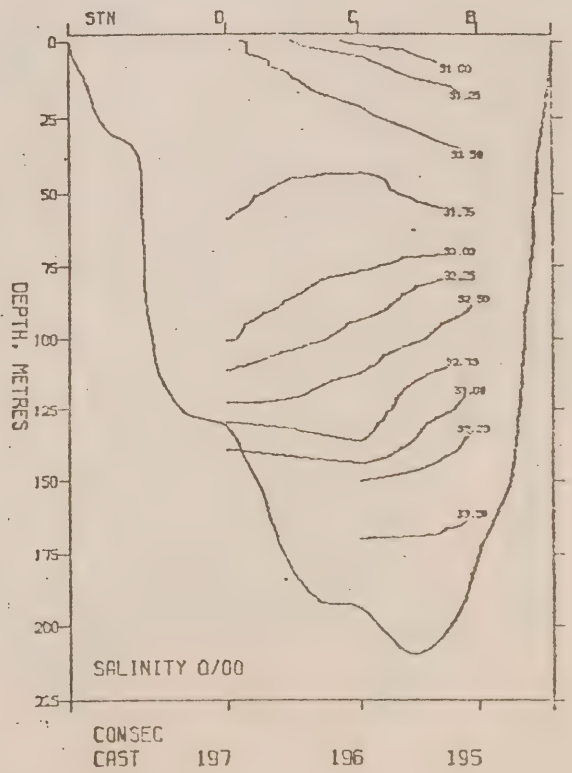
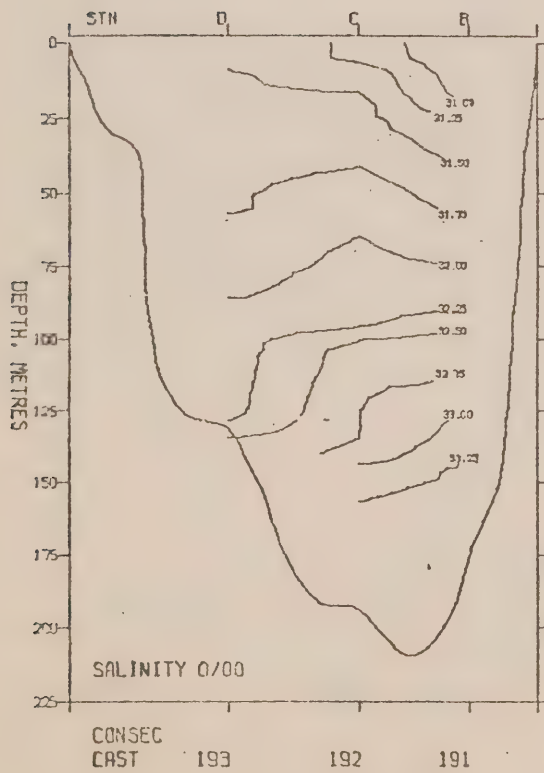
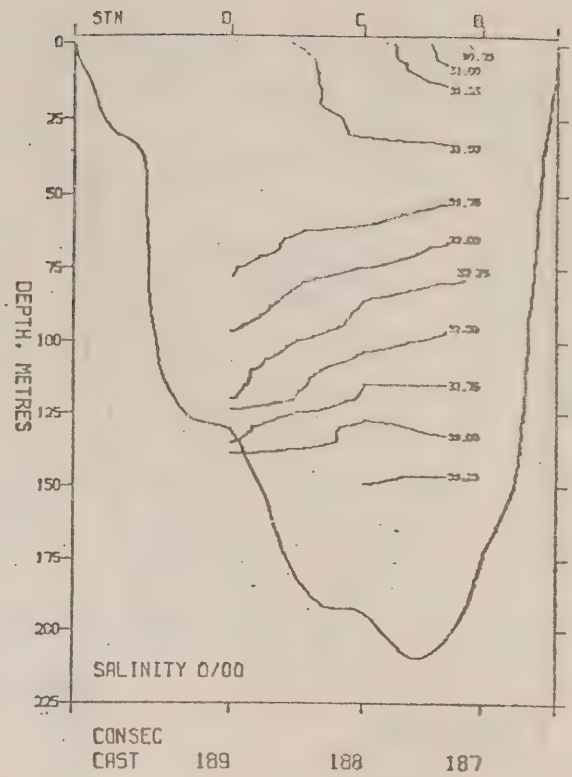
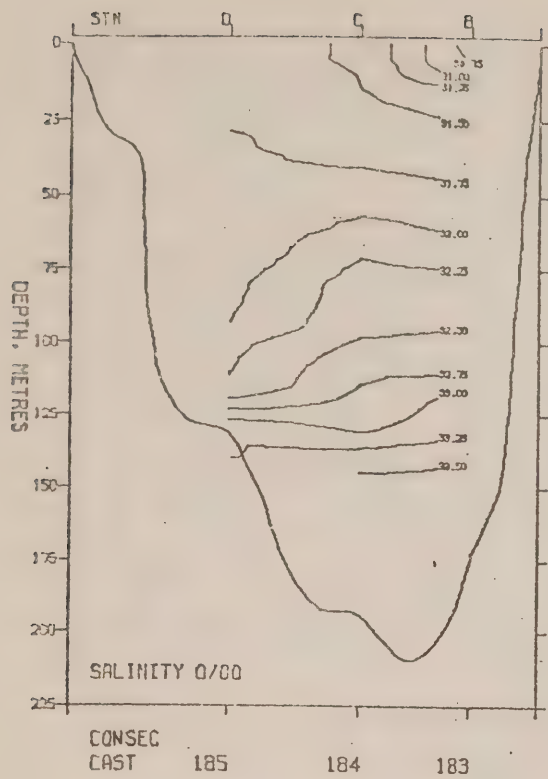




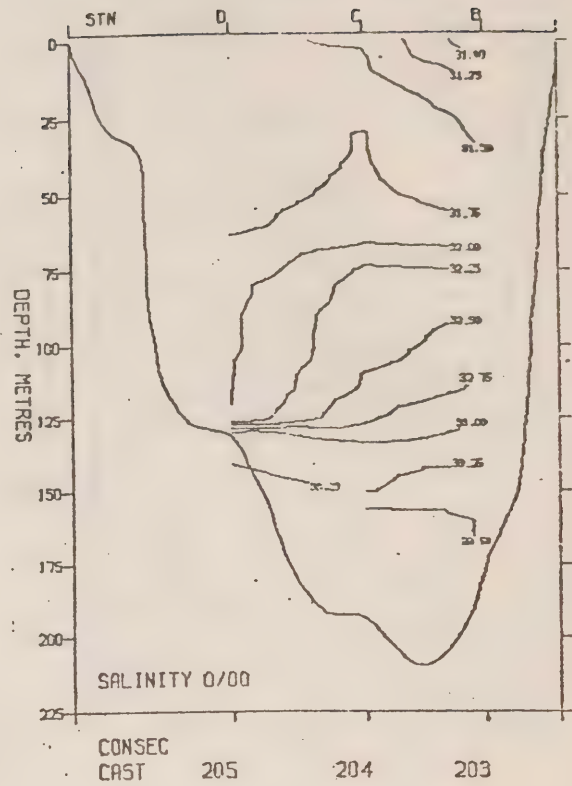
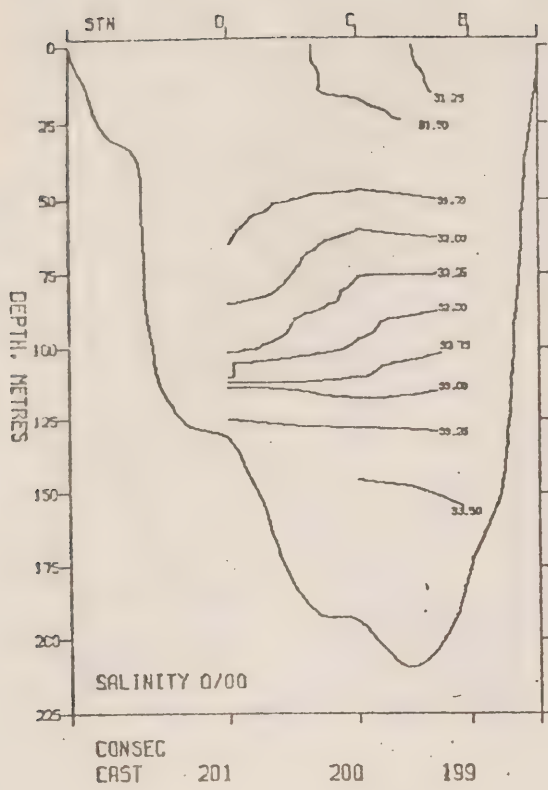


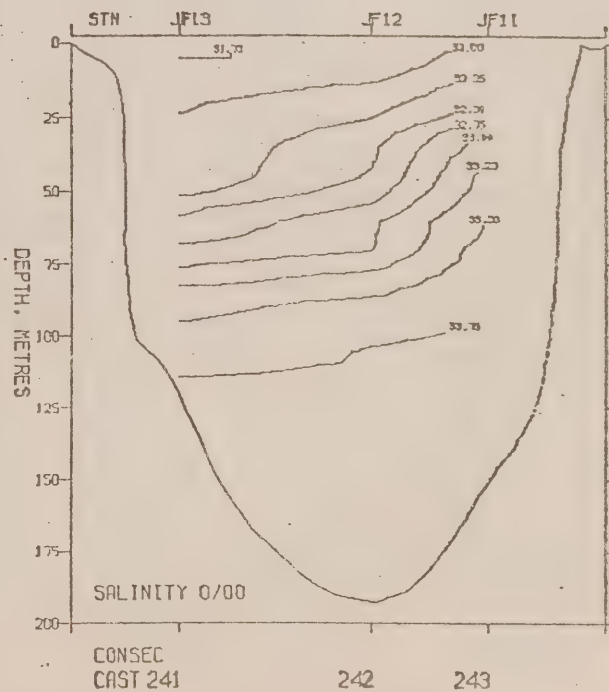
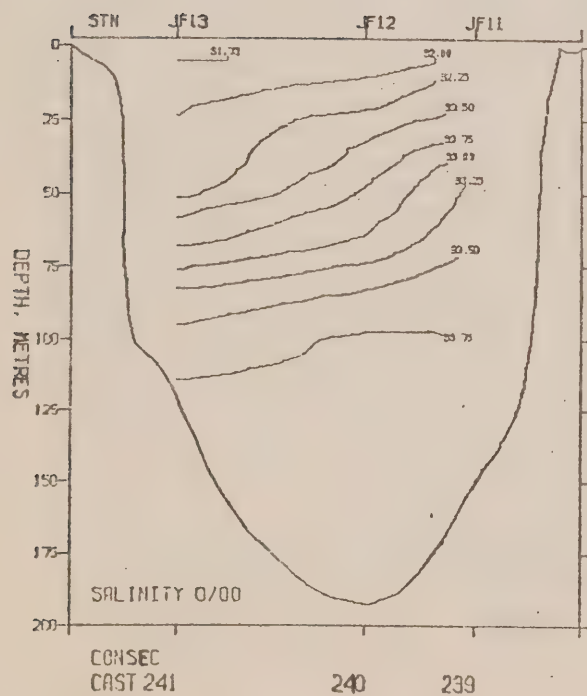
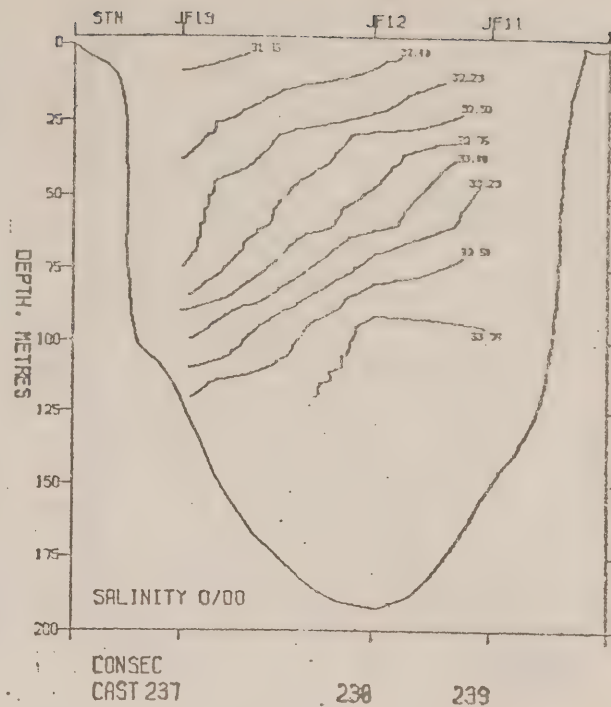
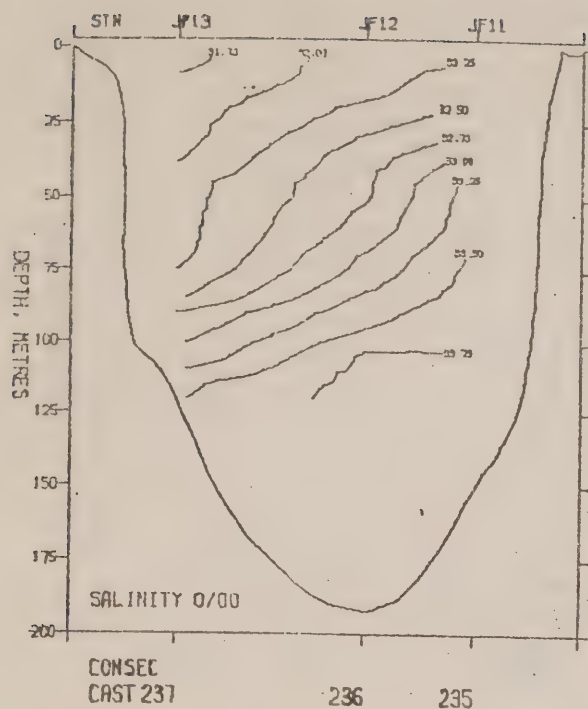


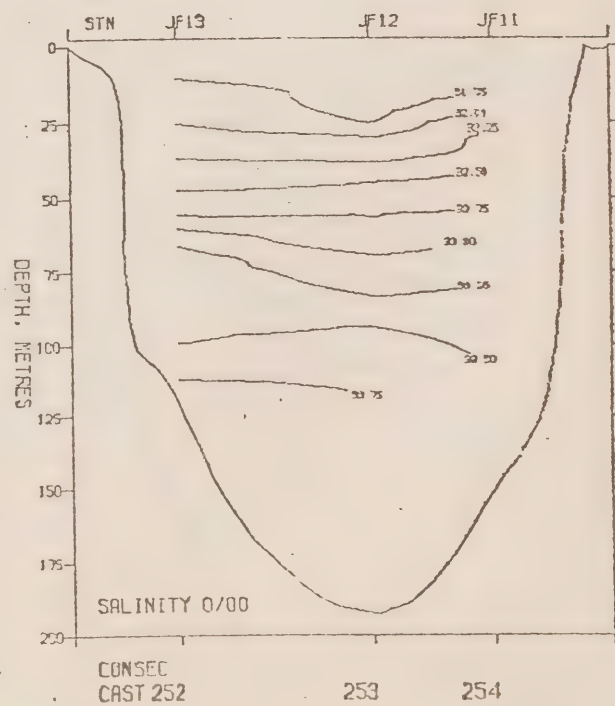
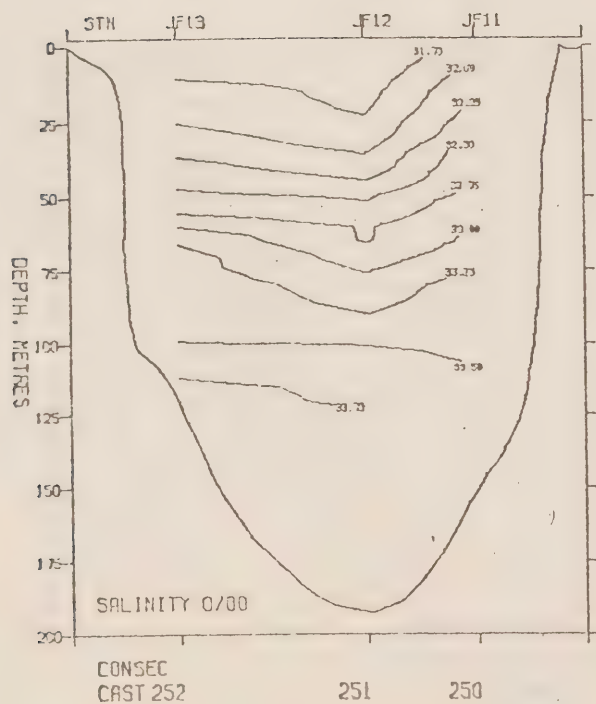
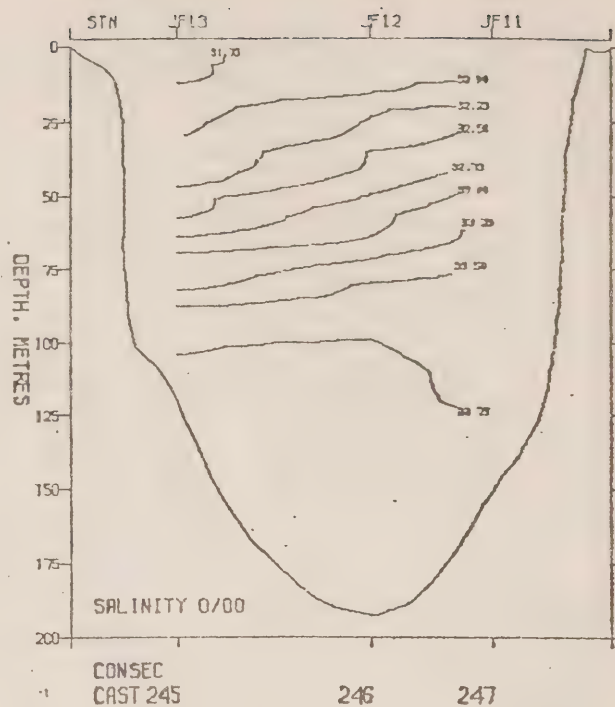
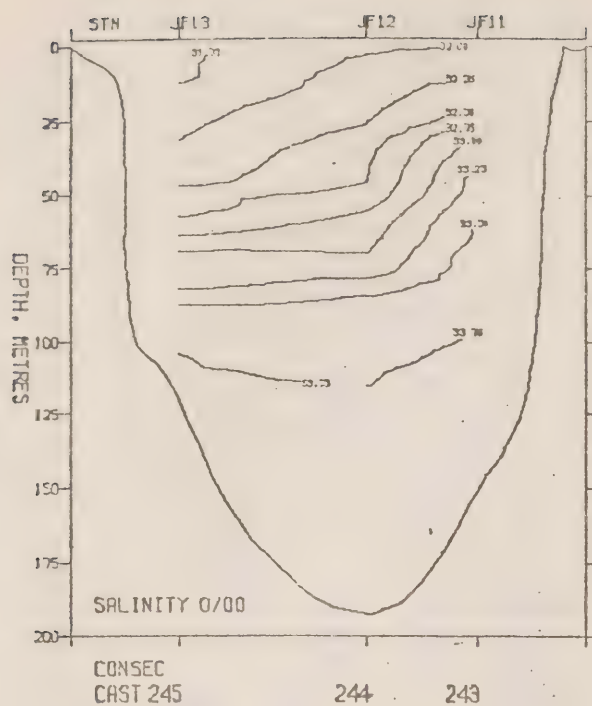


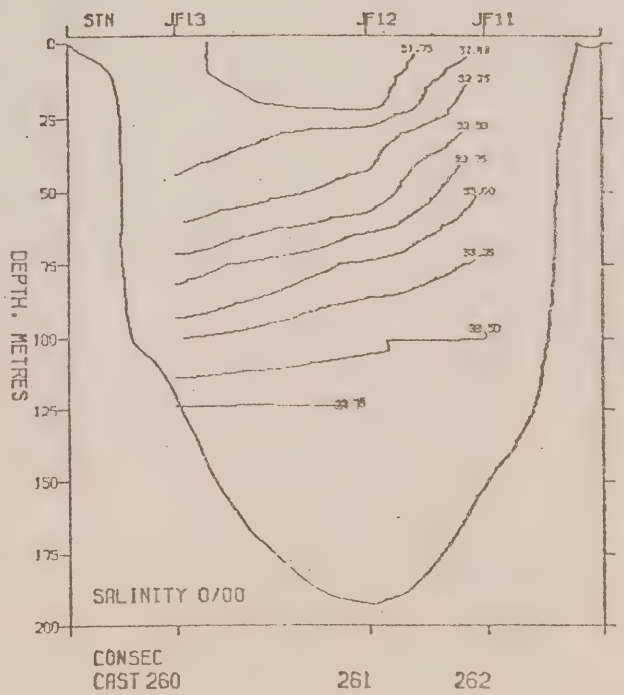
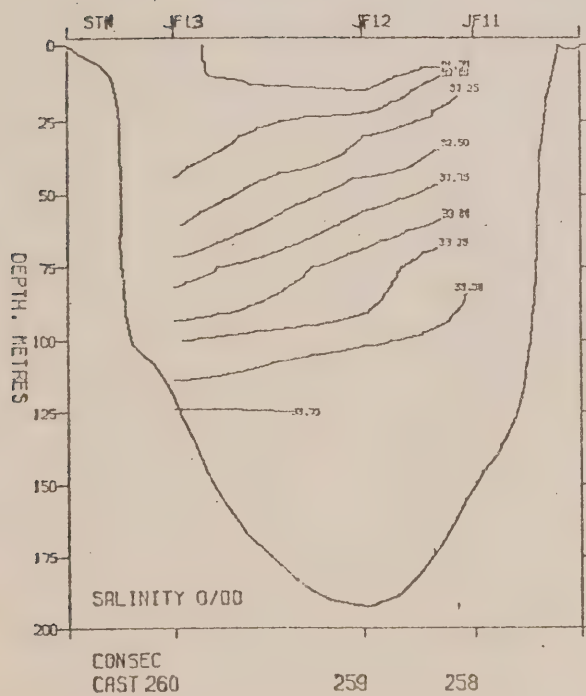
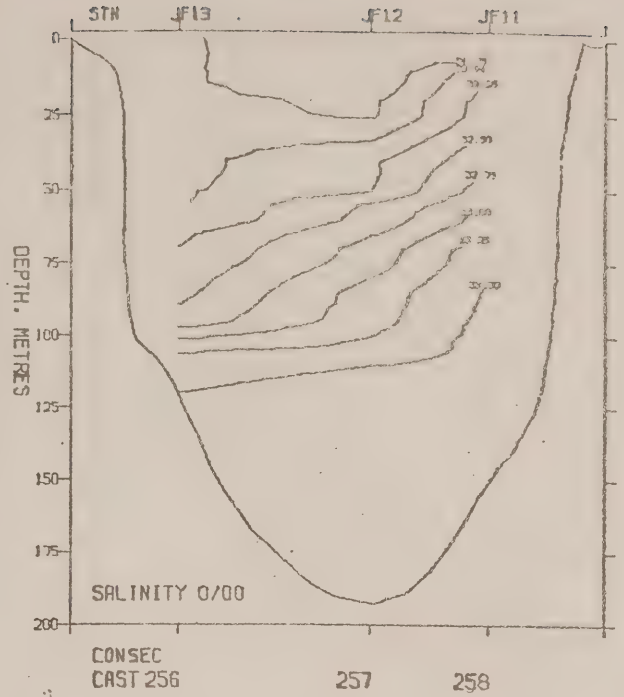
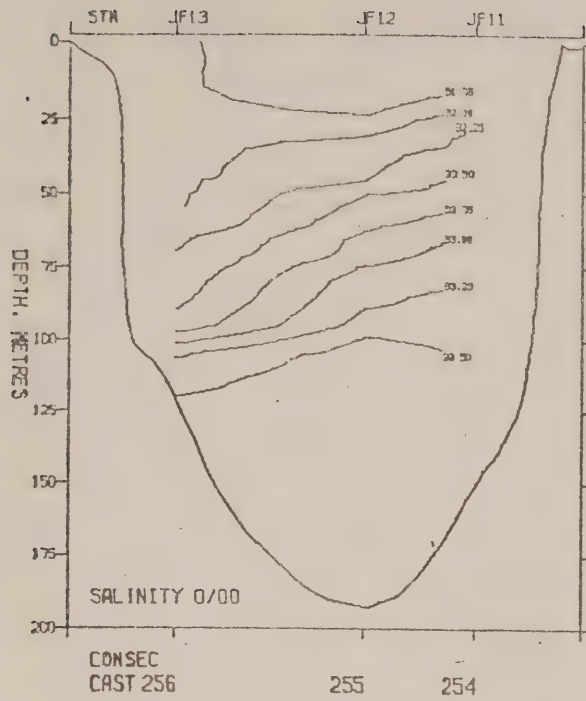




















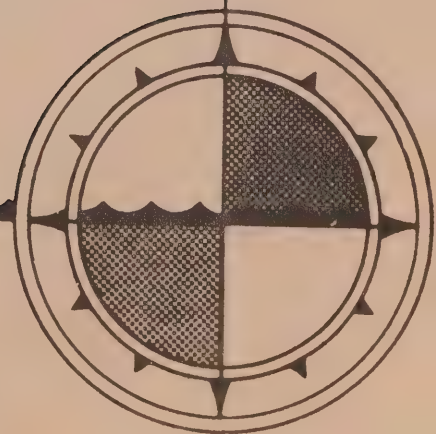
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**THE SALINITY INTRUSION  
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SALINITY, TEMPERATURE AND CURRENT  
OBSERVATIONS, 1976, 1977**

**by  
Alard Ages**

**INSTITUTE OF OCEAN SCIENCES, PATRICIA BAY  
Sidney, B.C.**





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1979



ABSTRACT

The salinity intrusion in the Main Arm of the Fraser River is examined by salinity and temperature measurements for a variety of discharges and tidal phases.

A detailed field study of the effect of the saltwedge upon the vertical distribution of flow is made by time series of salinities, temperatures and currents at selected points in the river.

The results are presented in tabular form and illustrated by contour charts and profile sketches.



## ACKNOWLEDGEMENTS

The data acquisition for this report was made possible by the cooperation of Bob Richardson of the Department of Public Works, who generously provided us with a berth for the launch *BRISK* at Steveston.

Thanks are due to Pat Crean (Numerical Modelling) and Jim Stronach (at that time of the Institute of Oceanography, UBC) for their help during the river cruises; and to Leslie Churchland of the Water Quality Branch of Inland Waters Directorate for her inspiring participation in our time series.

The time series in the fall of 1977 were carried out from the *RICHARDSON* and *VECTOR*. The cooperation of Captains Wheeler and Marston and their crews is appreciated, in particular the efforts of their engineers to keep the launch *BRISK* operational.

Finally, the assistance is acknowledged of Anne Harrison who did much of the field work in 1976 and who drew the halocline sketches, of Keith Lee who was responsible for the computer plotting, and of Stewart Langton who looked after our electronic equipment. Sheila Osborne and Sue McKenzie did most of the typing and the text was proofread by Sharon Thomson.

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## INTRODUCTION

The interaction between tides and river discharges of the Fraser, and its effects upon the water surface elevations and currents have been examined by various physical and mathematical models, for the purpose of navigation, sedimentation, sewage disposal and flood control.

Numerical models, such as those developed by the Institute of Ocean Sciences (1), and the National Research Council (2), are one-dimensional and vertically integrated. Although they appear to be adequately calibrated to produce river heights, they need much further refinement to simulate flow distributions.

The assumption of homogeneous flow in a vertically integrated model ignores the influence of the salinity intrusion upon the currents.

Advancing and retreating with the tides like a mobile broad-crested weir, the salinity wedge supports much of the outflowing fresh water in a longitudinal direction, continuously changing the outflow's cross-sectional area and hence the velocity profiles.

At a falling tide, the river flow in a vertically integrated model would be expected to accelerate in phase with the increasing hydraulic gradient. However, the flow regime in the Lower Fraser is complicated by the behaviour of the salt wedge, which continues its upstream motion for some time after high water, then retreats while initially maintaining its shape until the interface finally degenerates and the salt is washed out to sea as a homogeneous plug. At a rising tide, the hydraulic gradient becomes more horizontal; the river slows down but now the salt wedge moves upstream, forcing the surface outflow into higher velocities. Thus the behaviour of the salt wedge modifies, even counteracts the tidal effect upon the surface outflow, a condition which is not revealed by a vertically integrated model. The assumption of homogeneous flow in a model also ignores the upstream movement of bottom water in the salt wedge at an incoming tide (while the fresh water above the wedge may still move downstream).

Therefore, if a numerical model is to produce accurate current profiles in addition to water surface elevations, a knowledge of the behaviour of the salinity intrusion is fundamental.

In recent years, several agencies have conducted salinity and temperature studies in the Fraser delta (3). These observations, although valuable for studies of a reconnaissance nature, were not too useful in verifying a model because of the long time interval between hydrographic stations and the absence of simultaneous current measurements.

In 1976 and 1977, the Institute of Ocean Sciences intensified its Fraser program, using a fast launch equipped with a CSTD and an electromagnetic current meter. Unlike the previously used salinometers, the CSTD recorded the depths of the salinity and temperature observations, an essential feature for observations in a fast current. The electro magnetic current meter was selected because it lacks moving parts exposed to the silt laden river.



Longitudinal sections of the salt wedge were obtained for a variety of discharges and tidal phases; 24-hour time series of salinity, temperature and current profiles were taken at selected locations.

The time series were carried out jointly with the Water Quality Branch of Inland Waters Directorate at Vancouver to relate their measurements to local transport (4).

Profiles and tables were compiled from data collected for the verification of a new layered model which is being developed at the Institute of Ocean Sciences and which attempts to incorporate the movement of the salt wedge. Since there appears to be an immediate demand for salinity and current information in the Fraser delta, the data are presented in this separate report, before completion of the model. Additional information has been collected in 1978 and 1979 and will be made available in a following publication.

## OBSERVATIONS

The contour charts, Figures 3 - 48, illustrate the behaviour of the salinity intrusion at discharges ranging from 1,300 cms ( $\text{m}^3/\text{sec}$ ) to 8,000 cms, representing moderate non-freshet and freshet conditions.

The charts were compiled from salinity measurements taken from the hydrographic launch *BRISK* cruising between Sandheads and New Westminster at a speed of approximately 30 km/hr and stopping mid-channel at stations one to two kilometres apart.

Although the bottom profile in these figures applies to the deepest section of the river, the salinity observations could not always be taken at maximum depths: searching for maximum depth at each station would have been too time-consuming in view of the priority to complete each cruise in the shortest possible time and obtain isohalines comparable to the results of a stratified model.

Figure 2 shows the positions of the stations occupied in the Main Arm. Observations of the salinity intrusion in North Arm, Middle Arm and Canoe Pass are still in progress and will be completed in early 1980.

The time series of salinities, temperatures and currents (Figures 50 - 110) were obtained by anchoring a vessel near mid-channel at two locations in Main Arm and one in North Arm (Figure 49), and taking profiles at half-hour intervals, or less when the toe of the salinity wedge passed underneath.

The computer plots of the time series show salinities and temperatures plotted at depths corresponding to those of the current observations. Salinities and temperatures were recorded on an analog recorder, currents were point measurements. Plotted current directions are true. A simple non-directional propeller meter had to be used occasionally during a falling tide when the current became too strong to keep the much larger electromagnetic meter in the required upright position (with a permitted maximum extra weight of 7 kg).

Additional time series at other locations have been taken in 1978 and 1979 and will be published at a later date.

#### INSTRUMENTATION

Salinometer - Interocean CSTD model 500; platinum temperature sensor with a response time of 60 msec; digital display and 522 R analog recorder.

Salinity computed in the probe, from measured conductivity and temperature.

Listed accuracy 0.02°C for temperature  
0.02‰ for salinity.

Our temperature calibration:

average correction of -0.1°C at 2° - 10°C range;  
of -0.7°C at 11° - 30°C range.

Our salinity calibration:

correction of -0.2‰ at 0‰ - 15‰ range;  
of +0.3‰ at 16‰ - 30‰ range.

Current Meter - Marsh-McBirney model 527, electromagnetic water current meter; listed compass accuracy 10° (up to 25° tilt); these values have not yet been confirmed due to the lack of comparable local testing facilities. Provisional tests in situ did not reveal any major discrepancies (i.e. errors exceeding resp. 10° and 0.5 ft/sec). However, the tables may show some inconsistent directions at very low flows.

FIG. 1

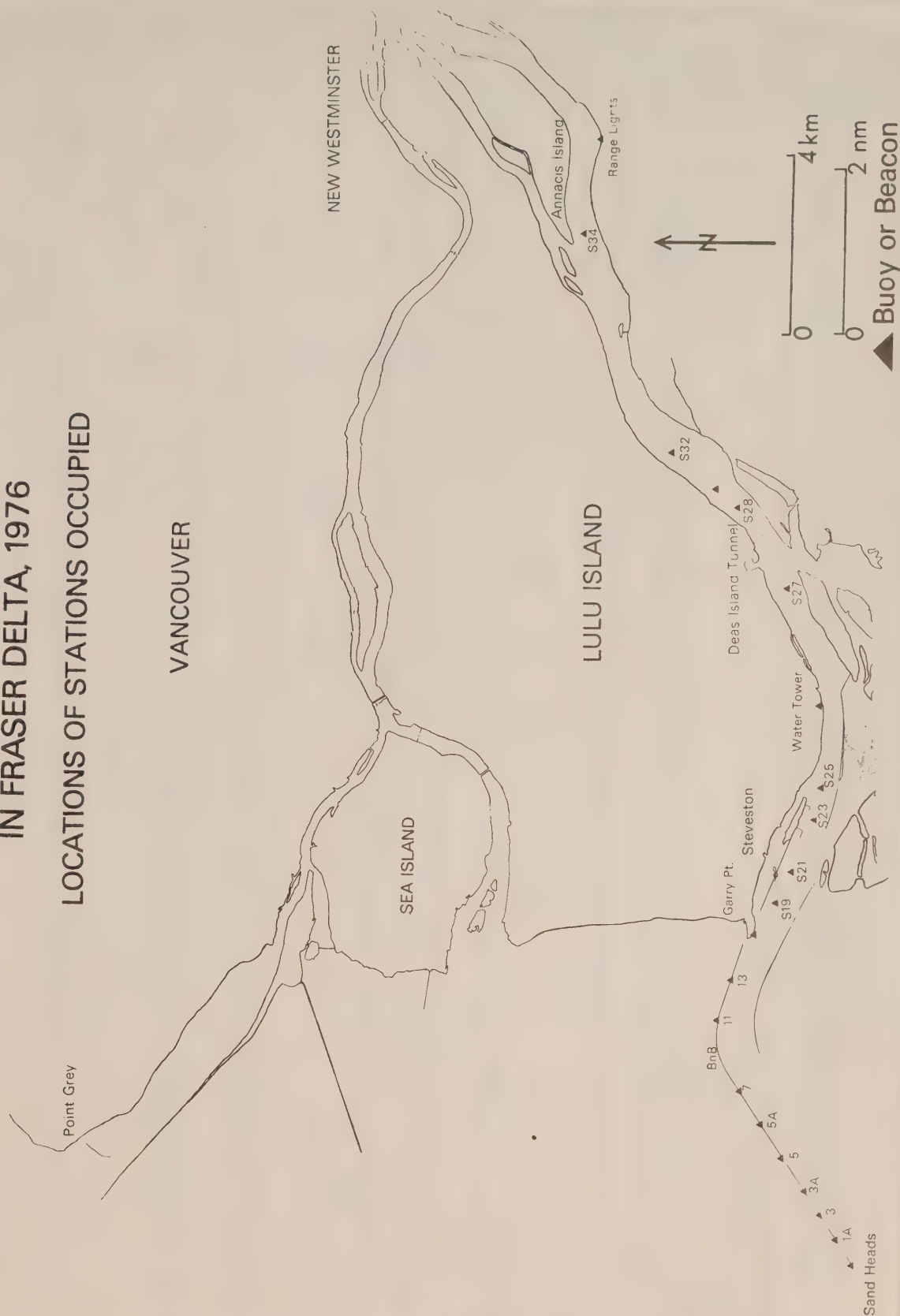
## THE FRASER RIVER BASIN



Figure 2

# SALINITY and TEMPERATURE OBSERVATIONS IN FRASER DELTA, 1976

## LOCATIONS OF STATIONS OCCUPIED





SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity ‰
18/5/76	Sandheads	06.43	0	9.0	0.0
			3	8.9	4.0
			6	8.8	28.0
			9	8.4	28.2
			10	8.4	29.1
	# 3	06.50	0	9.0	0.0
			3	8.9	6.7
			6	8.8	20.8
			9	8.7	28.5
			12	8.6	28.6
			13.8	8.6	28.6
	# 3A	06.53	0	9.0	0.0
			3	8.9	3.5
			6	8.9	13.0
			9	8.8	28.0
			12	8.8	28.1
			15	8.8	28.1
	# 5	06.57	0	9.0	0.0
			3	9.0	4.7
			6	8.9	20.7
			9	8.8	27.9
			12	8.8	27.9
			15	8.8	27.9
	# 5A	07.02	0	9.0	0.0
			3	9.0	3.0
			6	8.9	12.2
			9	8.8	27.6
			12	8.8	27.9
			14	8.8	27.9
	# 7	07.07	0	9.0	0.0
			3	8.9	0.1
			6	8.9	10.5
			9	8.9	24.1
			12	8.8	27.5
			15	8.8	27.8
	# 7A	07.10	17	8.8	27.8
			0	9.0	0.0
			3	8.9	0.1
			6	8.9	4.7
			9	8.8	23.5
			12	8.8	26.5
	# 13	07.22	15	8.8	27.5
			18	8.8	27.5
			21	8.8	27.6
			0	8.9	0.0
			3	8.9	0.0
			6	8.9	0.0
			9	8.9	0.4

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity ‰
18/5/79	# 13	07.22	12.8	8.8	22.1
	Garry Pt.	07.25	0	8.9	0.0
			10.3	8.9	0.0
	Garry Pt.	08.29	0	9.0	0.0
			3	8.9	0.0
			6	8.9	0.2
			9	8.9	0.9
			10	8.9	18.2
			10.6	8.8	24.9
	Garry Pt.	08.31	0	9.0	0.0
			3	9.0	0.0
			6	9.0	0.4
			9	9.0	1.6
			12	8.8	27.2
	Garry Pt.	08.35	0	8.9	0.0
			3	8.9	0.0
			6	8.9	0.0
			7	8.9	0.0
			8	8.9	0.6
	# 13	08.49	0	9.0	0.0
			3	8.9	0.0
			6	8.9	0.1
			9	8.9	15.1
			12	8.9	27.1
			12.4	8.8	27.1
22/6/79	Sandheads	10.47	0	12.9	0.0
			3.3	12.9	0.0
			5.3	12.0	5.0
			5.8	11.8	10.0
			6.7	11.2	20.0
			9.0	10.0	25.0
			11.3	9.0	29.0
	# 1A	10.50	0	0.0	0.0
			9	0.0	0.0
			11	4.8	5.0
			11.3	10.8	10.0
			12	15.2	12.4
	# 3	10.54	0	12.9	0.0
			12.3	12.8	0.0
	# 5	13.36	0	13.0	0.0
			5.7	13.0	0.0
			12.3	11.0	22.0
			16.7	10.7	26.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
22/6/76	# 3	13.41	0	13.2	0.0
			3.3	12.8	1.5
			4.7	12.6	5.0
			6.7	12.5	10.0
			10.0	11.8	20.0
			11.3	10.0	25.0
			13.7	10.7	26.9
	Sandheads	13.45	0	13.3	0.0
			4.3	13.3	5.0
			5.0	13.5	10.0
			5.7	13.0	20.0
			10.7	11.6	25.0
			11.3	11.0	26.0
	Sandheads	16.04	0	13.3	0.0
			2.7	12.9	5.0
			5.0	13.4	10.0
			6.0	11.8	20.0
			6.7	11.5	25.0
			12.0	10.6	27.4
	# 3	16.10	0	13.2	0.0
			1.3	12.9	2.5
			2.3	12.6	5.0
			3.3	12.5	10.0
			5.3	12.1	20.0
			6.7	11.7	25.0
			13.7	11.0	27.5
	# 5	16.20	0	13.0	0.0
			3.0	12.6	5.0
			5.0	12.5	10.0
			7.0	12.0	20.0
			8.3	11.6	25.0
			11.0	12.0	26.0
	# 5A	16.25	0	13.0	0.0
			3	13.0	-
			8.3	12.0	15.0
			8.7	11.6	20.0
			9.7	11.3	25.0
			15.3	11.2	26.0
	# 7A	16.30	0.	13.0	0.0
			6.3	13.0	0.0
			7.7	12.6	5.0
			9.0	12.3	10.0
			13.0	11.6	22.5
			20.3	10.0	24.9
	#11	16.41	0	13.0	0.0
			9.7	13.0	0.0
			11.3	12.8	5.0
			12.3	12.2	10.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
22/6/76	#11	16.41	13.0	11.6	15.0
			13.3	11.4	20.0
			15.3	11.4	23.1
29/6/76	Sandheads	13.35	0	12.9	0.0
			8.3	12.9	0.0
		14.55	0	12.9	0.0
			3.9	12.9	0.0
			4.5	12.7	5.0
			4.9	12.7	10.0
			6.8	12.7	20.0
			7.3	12.5	25.0
			9.3	10.0	27.5
	# 1A	14.59	0	12.8	0.0
			6.5	12.8	0.0
			7.1	12.7	5.0
			7.3	12.6	10.0
			8.4	11.6	20.0
			8.8	11.3	25.0
			9.7	11.1	26.3
	Sandheads	15.44	0	12.9	0.0
			0.4	12.8	0.0
			2.5	12.6	0.6
			2.6	12.6	5.0
			3.2	12.6	10.0
			4.7	12.1	20.0
			5.2	11.4	25.0
			10.5	9.5	28.8
	# 1A	15.46	0	12.9	0.0
			1	12.9	0.0
			2.9	12.9	0.2
			4.7	12.7	5.0
			5	12.4	10.0
			7.8	11.2	20.0
			8.7	10.5	27.5
	# 3	15.51	0	12.9	0.0
			1.6	12.9	0.0
			3	12.9	0.2
			8	12.8	1.0
			8.9	12.4	5.0
			9.3	12.2	10.0
			11	11.2	20.0
	# 3A	15.58	12.4	10.2	25.0
			0	12.9	0.0
	Sandheads	16.25	14.4	12.9	0.0
			0	13.0	0.0
			1.5	13.0	0.0
			2.2	12.8	1.0



SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
29/6/76	Sandheads	16.25	2.6	13.0	5.0
			3.8	13.3	10.0
			5.2	14.0	20.0
			6.1	12.2	25.0
			10	10.2	26.9
	# 1A	16.27	0	13.0	0.0
			0.5	12.9	0.0
			3.2	12.6	5.0
			3.8	12.3	10.0
			7.2	11.1	20.0
			9.1	10.8	25.0
			12	10.1	27.9
	# 3	16.30	0	13.0	0.0
			0.3	12.9	0.0
			2.1	12.9	1.0
			4.4	12.6	5.0
			5.0	12.1	10.0
			7.9	11.3	20.0
			9.3	11.0	25.0
			12.3	10.1	27.8
	# 3A	16.33	0	12.9	0.0
			3.5	12.8	0.0
			6.5	12.6	5.0
			7.8	12.0	10.0
			10	11.0	20.0
			11.1	10.5	25.0
			15.2	10.0	27.6
	# 5	16.38	0	12.9	0.0
			5.5	12.9	0.0
			7.7	12.9	5.0
			9.8	12.0	10.0
			12.0	10.6	20.0
			12.5	10.2	25.0
			14.4	10.2	26.2
	Sandheads	16.56	0	13.1	0.2
			1.1	13.0	0.5
			1.7	12.6	5.0
			3.1	13.4	10.0
			8.1	12.4	20.0
			8.8	11.2	25.0
			11.4	10.7	27.4
	# 1A	16.59	0	13.1	0.2
			1.8	12.8	0.5
			3.7	12.6	5.0
			4.6	12.4	10.0
			7.3	12.2	20.0
			7.4	12.1	25.0
			11.7	11.1	27.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976.

Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
29/6/76	# 3	17.01	0	13.1	0.0
			1.6	12.9	0.0
			4	12.6	5.0
			5.7	12.4	10.0
			8.3	11.7	20.0
			9.2	10.8	25
			14	10.7	27.2
	# 3A	17.05	0	13.1	0.0
			4.5	12.6	5.0
			6.4	12.0	10.0
			9.7	11.4	20.0
			11.8	10.6	25.0
			15.3	10.3	27.6
	# 5	17.08	0	12.9	0.0
			2.3	12.9	0.0
			3.4	12.4	5.0
			4.9	12.0	10.0
			8.7	11.6	20.0
			9.6	10.8	25.0
			15.4	10.4	27.1
	# 5A	17.12	0	13.0	0.0
			3.5	12.9	0.0
			5.1	12.4	5.0
			6.5	11.9	10.0
			11.4	11.0	20.0
			12.5	10.6	25.0
			13.6	10.6	26.0
	# 7	17.18	0	12.8	0.0
			18	12.8	0.0
	Sandheads	17.36	0	13.1	0.0
			1	12.9	0.5
			2.6	12.7	5.0
			3.7	13.4	10.0
			7.8	12.8	20.0
			8.5	11.2	25.0
			10.8	10.6	26.8
	# 1A	17.38	0	13.2	0.0
			1.2	13.0	0.0
			3.5	13.0	5.0
			5.8	13.1	10.0
			6.7	13.0	20.0
			7.0	11.2	25.0
			13.9	10.6	27.8
	# 3	17.41	0	13.0	0.0
			0.9	12.8	0.0
			3.8	12.8	5.0
			5.7	13.1	10.0
			6.8	12.4	20.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
29/6/76	# 3	17.41	8.2	11.5	25.0
			14.9	11.0	27.1
	# 3A	17.44	0	13.0	0.0
			0.5	12.9	0.0
			3.7	12.6	5.0
			6	12.6	10.0
			9.3	13.4	20.0
			10.7	12.3	25.0
			16.4	11.3	26.6
	# 5	17.47	0	12.9	0.0
			1	12.8	0.0
			2.6	13.4	5.0
			5.3	13.8	10.0
			8.8	12.8	20.0
			10.1	11.8	25.0
			15.6	11.2	26.8
	# 5A	17.51	0	12.9	0.0
			0.3	12.9	0.0
			4.5	12.5	5.0
			5.6	12.0	10.0
			8.8	12.0	20.0
			10.3	11.2	25.0
			14.2	11.0	26.3
	# 7	17.55	0	12.9	0.0
			3	12.9	0.0
			4	12.9	0.2
			7.4	12.4	5.0
			10.9	12.0	10.0
			14.7	11.4	20.0
			17.4	11.0	25.0
	BnB	17.57	18.5	11.0	25.2
			0	12.8	0.0
			4	12.8	0.0
			6.5	12.8	0.2
			11	12.6	5.0
			14.3	12.2	10.0
			16.9	11.4	20.0
	# 7A	18.00	21	11.2	25.0
			21.3	11.2	25.0
			0	12.9	0.0
			4	12.9	0.0
			5	12.8	0.2
			7.4	12.4	5.0
			13.3	12.2	10.0
			18.4	11.6	20.0
			21	11.2	25.0
			23.2	11.2	25.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
29/6/76	#11	19.29	0	13.0	0.0
			3.5	12.9	0.0
			5.3	13.4	5.0
			6.2	13.4	10.0
			9.2	12.2	20.0
			12.6	11.7	25.0
			14.1	11.7	25.0
	Sandheads	19.44	0	13.0	0.0
			1.1	13.2	5.0
			1.4	13.8	10.0
			6.5	14.0	20.0
			9.2	11.2	25.0
			12.2	10.6	27.0
	# 3	19.50	0	12.9	1.0
			0.2	12.9	2.5
			1	13.1	5.0
			1.8	13.9	10.0
			6	13.8	20.0
			10.2	11.0	25.0
			14.5	10.3	27.4
	# 5	19.55	0.5	13.0	0.5
			0.9	13.4	5.0
			2.4	14.0	10.0
			7.9	12.6	20.0
			10.2	11.2	25.0
			15.9	10.7	27.0
	# 7	20.00	2.3	12.9	0.7
			2.7	13.8	5.0
			3.3	13.8	10.0
			10.9	12.4	20.0
			15.1	11.7	25.0
			19.4	11.7	26.0
	#11	20.06	0.0	13.0	0.0
			0.8	13.3	0.0
			3.4	13.6	2.5
			5.1	13.6	5.0
			6.2	13.6	10.0
			9.4	12.8	20.0
			13.8	11.8	25.0
			17.8	11.7	25.6
29/6/76	#13	20.10	0	12.9	0.0
			5	12.9	0.0
			5.9	12.8	5.0
			6.7	12.6	10.0
			9.3	12.4	20.0
			14	11.4	24.2



SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
29/6/76	Garry Pt.	20.14	0	12.9	0.0
			4.6	12.9	0.0
			5.5	12.9	0.1
			6.5	12.5	5.0
			8.2	12.4	10.0
			10	11.8	20.0
			11	11.6	22.0
	S19	20.12	0	12.8	0.0
			11.6	12.8	0.0
	#13	20.57	0	12.8	0.0
			5	12.8	0.0
			6.2	12.8	5.0
			7.4	12.6	10.0
			8.9	12.4	20.0
			12.5	11.9	24.8
	S19	21.13	0	12.7	0.0
			8	12.7	0.0
			9.2	12.4	5.0
			9.4	12.3	10.0
			10.5	12.0	15.0
			12.2	11.8	17.2
	S21	21.19	0	12.7	0.0
			11.5	12.7	0.0
4/8/76	#1A	08.38	0	15.3	0.0
			5	15.3	0.0
			8.4	14.4	5.0
			9.1	12.3	10.0
			9.3	11.8	20.0
			9.8	11.0	25.0
	# 3	08.44	0	15.3	0.0
			8	15.3	0.0
	#1A	09.37	0	15.3	0.0
			2.5	15.3	0.0
			3.9	14.9	5.0
			4.9	14.0	10.0
			6.5	12.0	20.0
			7	11.6	25.0
	# 3	09.40	0	15.3	0.0
			4	15.3	0.0
			5.4	14.6	5.0
			6.4	13.6	10.0
			8.2	12.0	20.0
			9.0	11.5	25.0
	#3A	09.44	0	15.3	0.0
			7.6	15.3	0.0
			9	14.2	5.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
4/8/76	#3A	09.44	9.6	13.5	10.0
			11	12.2	20.0
			11.8	11.4	25.0
	# 5	09.48	0	15.3	0.0
			Bottom	15.3	0.0
	#S4	09.50	0	15.3	0.0
			Bottom	15.3	0.0
	#1A	10.46	0	15.3	0.0
			0.8	15.0	0.0
			3.4	14.8	5.0
			5.3	15.3	10.0
			5.8	12.8	20.0
			6.3	12.0	25.0
	# 3	10.50	0	15.4	0.0
			1.5	15.3	0.0
			3.8	14.7	5.0
			5	14.4	10.0
			8.1	12.8	20.0
			9.2	11.4	25.0
	#3A	10.53	0	15.3	0.0
			1.6	15.0	0.0
			3.2	14.5	5.0
			4.8	13.8	10.0
			7.2	13.0	20.0
			9	12.8	25.0
	# 5	10.57	0	15.3	0.0
			2	15.3	0.0
			3.4	14.6	5.0
			4.9	13.3	10.0
			?	13.0	20.0
			9.4	12.3	25.0
	#5A	11.03	0	15.3	0.0
			2.9	15.3	0.0
			5	14.6	5.0
			7.4	14.0	10.0
			9.2	12.6	20.0
			11.4	12.2	25.0
	Bn	11.05	0	15.3	0.0
			6	15.3	0.0
			8.5	14.4	5.0
			10.4	13.8	10.0
			13.2	12.0	20.0
	# 7	11.08	0	15.3	0.0
			12	15.3	0.0
			14	14.6	5.0
			16	14.2	10.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
4/8/76	#1A	13.30	-	-	0.0
			1.9	-	5.0
			2.8	-	10.0
			5.7	-	20.0
			7.0	-	25.00
	#1A	13.35	-	-	0.0
			1.9	-	5.0
			2.8	-	10.0
			5.6	-	20.0
			7.5	0	25.0
	# 3	13.48	-	15.5	0.0
			1.5	15.8	5.0
			3.1	15.4	10.0
			4.6	14.4	20.0
			8.5	10.8	25.0
	#3A	13.55	-	15.6	0.0
			1.9	16.0	5.0
			3.2	15.6	10.0
			6.1	14.3	20.0
			8.6	11.6	25.0
	# 5	13.58	0	15.6	0.0
			0.3	15.6	0.0
			2.8	15.6	5.0
			3.9	15.6	10.0
			6.4	13.4	20.0
	Bn	14.05	9.1	11.8	25.0
			0	15.6	0.0
			1.9	15.5	0.0
			2.9	14.9	5.0
			4.0	14.6	10.0
	#7	14.09	8.4	13.8	20.0
			10.8	11.9	25.0
			-	15.7	0.0
			3.9	14.6	5.0
			4.2	14.2	10.0
	BnB	14.13	7.3	13.2	20.0
			13.6	12.0	25.0
			0	15.6	0.0
			2.8	15.3	0.0
			4.1	14.8	5.0
	#11	14.19	4.5	14.2	10.0
			7.8	13.2	20.0
			15.5	13.1	25.0
			0	15.6	0.0
			3.6	15.4	0.0
			5.2	14.6	5.0
			5.7	14.4	10.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp ( $^{\circ}\text{C}$ )	Salinity ( $\text{‰}$ )
4/8/76	#11	14.19	7.5	15.4	20.0
			14.5	13.3	24.7
	S19	14.31	0	15.4	0.0
			6.8	15.4	0.0
			8.4	14.4	5.0
			8.8	14.2	10.0
			10.3	13.0	17.0
	S21	14.37	0	15.4	0.0
			Bottom	15.4	0.0
	S 2	15.04	0	15.7	0.0
			0.9	15.7	5.0
			1.8	16.0	10.0
			3.0	15.4	15.0
			4.6	14.6	20.0
			9.2	12.5	25.0
	# 3	15.15	0	15.7	0.0
			1.2	15.8	5.0
			2.9	15.6	10.0
			4.3	15.2	15.0
			5.8	12.6	20.0
			7.5	11.8	25.0
	# 5	15.19	0	15.6	0.0
			2.3	15.7	5.0
			4	15.6	10.0
			5.4	13.9	20.0
			8.1	11.8	25.0
	# 7	15.25	0	15.6	0.0
			4	14.7	5.0
			4.4	14.2	10.0
			5.4	13.4	20.0
			11	12.8	25.0
	#11	15.33	0	15.5	0.0
			5.2	15.0	5.0
			6.5	14.4	10.0
			7.8	13.0	20.0
			12.8	12.5	25.0
	#13	15.41	0	15.5	0.0
			4.4	15.6	0.0
			6.2	14.8	5.0
			6.5	14.6	10.0
			7.4	13.4	20.0
			12.8	12.4	24.4
	S19	15.45	0	15.5	0.0
			6.3	15.5	0.0
			8	14.1	5.0
			8.5	13.7	10.0



SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
4/8/79	S19	15.45	9.2	12.8	20.0
	S21	15.48	0	15.5	0.0
			Bottom	15.5	0.0
	S19	16.34	0	15.5	0.0
			6.9	15.5	0.0
			8.1	14.6	5.0
			8.7	13.8	10.0
			8.9	13.4	15.0
			9.3	12.9	20.0
			10.5	12.7	21.0
	S21	16.43	0	15.5	0.0
			Bottom	15.5	0.0
	S21	18.20	0	15.6	0.0
			13	15.6	0.0
	# 8	18.53	0	15.6	0.0
			1.9	14.6	5.0
			2.3	14.0	10.0
			4	12.4	10.0
			4.7	11.5	25.0
	# 5	19.00	0	15.6	0.0
			2.1	15.0	5.0
			2.8	13.4	10.0
			4.4	12.9	20.0
			7.0	11.8	25.0
	# 7	19.07	0	15.6	0.0
			4.6	14.8	5.0
			5.2	14.2	10.0
			5.9	12.5	20.0
			8	11.9	25.0
	#11	19.13	0	15.6	0.0
			8	14.6	5.0
			8.3	14.2	10.0
			9.3	13.0	20.0
			13.5	12.2	24.8
	#13	--	0	15.6	0.0
			8.7	14.4	5.0
			8.9	14.3	10.0
			9.9	13.0	20.0
			11.5	12.4	23.6
	#19	19.26	0	-	0.0
			7.5	-	0.0
			9.4	-	5.0
			9.6	=	10.0
			9.9	-	20.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
25/8/76	S19	07.39	0	14.5	0.0
			8	14.5	0.0
			9.4	14.2	5.0
			9.7	-	10.0
			10	-	17.3
	S17	07.46	0	14.5	0.0
			5.4	14.5	0.0
			9.5	13.8	5.0
			10.7	13.6	6.0
	S13	07.49	0	14.5	0.0
			5.1	14.5	0.0
			8.3	14.0	5.0
			9.	13.5	10.0
			11	13.2	20.0
			12.2	13.0	24.5
	#11	07.51	0	14.4	0.0
			7.8	13.5	5.0
			8.4	12.9	10.0
			9.8	12.0	20.0
			10.4	11.0	25.0
	#7A	07.55	0	14.5	0.0
			2.3	14.4	0.0
			15.3	14.0	5.0
			16.2	12.6	10.0
			18.4	11.8	19.7
	#5A	08.00	0	14.4	0.0
			0.8	14.4	0.0
			5.7	-	5.0
			6.4	-	10.0
			8.2	11.8	20.0
			9.4	10.8	25.0
	#3A	08.05	0	14.5	0.0
			0.3	14.4	0.0
			4	13.8	5.0
			5.8	13.2	10.0
			7	11.8	20.0
			8.2	11.2	25.0
	#3A	08.10	0	14.3	0.0
			1.4	14.0	5.0
			2.6	13.4	10.0
			4.2	11.8	20.0
			5.6	11.2	25.0
	S19	08.43	0	14.5	0.0
			Bottom	14.3	0.0
	#13	08.50	0	14.5	0.0
			8.8	14.3	0.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
25/8/76	#11	08.53	0	14.5	0.0
			5.9	14.5	0.0
			11.7	13.8	5.0
			14.8	13.5	8.0
	#7A	08.58	0	14.4	0.0
			21.2	14.4	0.0
			22.4	13.8	5.0
	# 7	09.00	0	14.5	0.0
			11.9	14.0	5.0
			14.6	13.3	10.0
			17.2	12.6	15.0
			17.5	12.2	16.5
	Bn	09.02	0	14.5	0.0
			8	13.8	5.0
			10.4	13.2	10.0
			12.8	12.4	15.0
			14	11.8	20.0
			15	10.8	24.5
	# 5	09.06	0	14.5	0.0
			6.7	13.8	5.0
			12.8	13.3	10.0
	#3A	09.08	0	14.4	0.0
			8.7	13.8	5.0
			12	13.4	10.0
	# 3	09.10	0	14.4	0.0
			5.4	14.0	5.0
			7.5	13.1	10.0
			8.6	12.2	15.0
			9.6	11.6	20.0
			11.8	11.2	25.0
	#1A	09.14	0	14.4	0.0
			3.9	13.8	5.0
			5	13.0	10.0
			6.6	12.4	-
			8.1	11.8	20.0
	Sandheads	09.15	10	11.1	25.0
			0	14.4	0.0
			2.4	14.0	5.0
			5	13.2	10.0
			6.1	12.5	15.0
	# 3	09.22	7.6	11.8	20.0
			0	14.4	0.0
			7	13.8	5.0
			9.2	13.2	10.0
			11.3	12.0	15.0
			11.6	11.6	20.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
25/8/76	# 5	09.29	0	14.4	0.0
			14	14.0	4.0
	#5A	09.33	0	14.5	0.0
			12.2	14.4	0.5
	# 5	09.49	?	14.5	0.0
			12.9	14.4	0.3
	#3A	09.51	0	14.5	0.0
			13	14.4	0.4
			17.8	14.4	1.0
	# 3	09.54	0	14.4	0.0
			12.2	14.4	0.8
	#1A	09.56	0	14.4	0.0
			10.6	14.4	1.4
	Sandheads	09.58	0	14.4	0.0
			8.8	14.4	1.5
	Sandheads	10.12	0	14.4	0.0
			8	14.4	6.0
	Sandheads	13.48	0	-	0.0
			2.2	-	0.0
			3.1	-	5.0
			4.0	-	10.0
			5.5	-	20.0
			5.6	-	25.0
			9.1	-	30.0
	#1A	13.51	0	14.8	0.0
			3.4	14.8	0.0
			4.3	14.0	5.0
			5.2	13.8	10.0
			7.1	12.4	20.0
			7.9	11.7	25.0
			11.5	10.8	29.5
	# 3	13.54	0	14.8	0.0
			4.7	14.8	0.0
			7.4	14.2	5.0
			7.8	13.7	10.0
			10	12.2	20.0
			13	11.7	25.0
	#3A	13.56	0	14.8	0.0
			Bottom	14.8	0.0
	Sandheads	14.48	0	14.8	0.0
			0.5	14.8	0.0
			2.9	15.0	5.0
			3.7	15.0	10.0
			4.8	11.6	20.0



SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
25/8/76	Sandheads	14.48	5.3	11.4	25.0
	#1A	14.52	0	14.8	0.0
			1.3	14.8	0.0
			3.1	14.5	5.0
			4.1	14.4	10.0
			5.5	12.2	20.0
			6.2	11.5	25.0
	#3A	14.58	0	14.8	0.0
			2.9	14.8	0.0
			3.5	14.2	5.0
			5.2	13.6	10.0
			7.4	11.8	20.0
			9.9	11.2	25.0
	#5A	15.02	0	14.8	0.0
			9	14.8	0.0
			11.4	14.0	5.0
			12.6	13.6	10.0
	Bn	15.04	0	14.8	0.0
			Bottom	14.8	0.0
	Sandheads	15.48	0	14.6	0.0
			0.6	14.6	0.0
			3.5	14.8	5.0
			5.2	15.4	10.0
			5.8	11.2	15.0
			6.0	11.0	20.0
			6.6	10.9	25.0
	#1A	15.50	0	14.8	0.0
			1.3	14.8	0.0
			3.6	14.2	5.0
			5	14.0	10.0
			5.4	13.4	15.0
			5.5	12.8	20.0
			5.9	11.1	25.0
	#3A	15.57	0	14.8	0.0
			2.4	14.8	0.0
			3.9	14.1	5.0
			5.6	13.8	10.0
			6.6	12.3	15.0
			7.3	12.2	20.0
			8.2	11.8	25.0
	# 5	16.00	0	14.8	0.0
			2	14.8	0.0
			3.4	14.2	5.0
			5.2	14.0	10.0
			5.9	13.4	15.0
			7.4	12.2	20.0
			10	11.2	25.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
25/8/76	#5A	16.03	0	14.8	0.0
			2.5	14.8	0.0
			4.1	14.2	5.0
			5.0	13.6	10.0
			6.7	12.6	15.0
			9.7	11.9	20.0
			11.2	11.0	25.0
	# 7	16.07	0	14.8	0.0
			4.6	14.8	0.0
			8.2	14.4	5.0
			10.8	13.6	10.0
			12.2	12.6	15.0
			14	11.8	20.0
			15.7	11.1	25.0
	#7A	16.10	0	14.8	0.0
			4.2	14.8	0.0
			5.5	14.1	5.0
			7.9	13.4	10.0
			11	12.8	15.0
			13.3	12.0	20.0
			20.3	11.3	25.0
	#11	16.15	0	14.8	0.0
			5.8	14.8	0.0
			6.8	14.4	5.0
			7.8	13.6	10.0
			9.8	12.6	15.0
			12	11.9	20.0
			19	11.6	22.8
	#13	16.31	0	14.8	0.0
			6.9	14.8	0.0
			9.6	14.2	5.0
			10.2	13.8	10.0
			11.0	12.8	15.0
			13.5	12.4	17.0
	S17	16.40	0	14.8	0.0
			Bottom	14.8	0.0
	A21	18.28	0	14.8	0.0
			Bottom	14.8	0.0
	S19	18.31	0	14.8	0.0
			6.2	14.8	0.0
			7.3	14.0	5.0
			8	13.4	10.0
			11	12.0	20.0
	# 7	19.05	0	14.8	0.0
			2.5	14.8	0.0
			3.7	14.0	5.0
			3.8	13.4	10.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
25/8/76	# 7	19.05	5.0	12.8	20.0
			7.9	11.4	25.0
	#11	19.12	0	14.8	0.0
			2.5	14.8	0.0
			4.1	14.2	5.0
			5.1	13.3	10.0
			6.1	12.2	20.0
			7.7	11.1	25.0
	#13	19.20	0	14.8	0.0
			3.1	14.8	0.0
			5.8	14.1	5.0
			6.1	13.7	10.0
			7.6	11.5	20.0
			9	11.1	25.0
	S19	19.30	0	14.8	0.0
			5.6	14.8	0.0
			7	14.2	5.0
			8	13.6	10.0
			9	12.0	20.0
	S21	19.36	0	14.8	0.0
			7.2	14.8	0.0
			9.1	14.2	5.0
			9.8	13.5	10.0
			12	12.0	19.7
	#23	19.44	0	14.6	0.0
			Bottom	14.7	0.0
23/9/76	Sandheads	11.49	0	14.4	0.0
			1	13.9	5.0
			4	13.4	10.0
			5.2	13.2	15.0
			6.3	12.8	20.0
			7.0	11.6	25.0
			9.0	11.5	26.2
	#1A	11.52	0	14.6	0.0
			4.1	14.4	5.0
			6.3	13.2	10.0
			6.9	12.4	15.0
			7.8	12.0	20.0
			8.2	11.0	25.0
			10.9	10.7	27.7
	#3A	12.00	0	14.6	0.0
			13.9	14.5	1.9
	# 5	12.08	0	14.6	0.0
			13.1	14.4	1.5

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
23/9/76	Sandheads	12.41	0	14.8	0.0
			2.1	14.0	5.0
			2.6	14.0	10.0
			3.6	13.9	15.0
			3.8	-	15.5
			3.7	-	14.0
			4.1	-	15.0
			4.5	12.0	20.0
	#1A	12.47	0	14.6	0.0
			4.2	14.0	5.0
			5.1	13.8	10.0
			6.6	12.8	15.0
			7.1	12.2	20.0
			7.5	11.6	25.0
			11.9	10.8	27.7
	# 3	12.51	0	14.8	0.0
			0.3	14.8	0.0
			5.4	11.8	5.0
			6.6	13.0	10.0
			7.3	12.5	15.0
			8.3	12.1	20.0
			9	11.3	25.0
	#3A	12.54	13.1	11.0	27.0
			0	14.8	0.1
			1.2	14.5	0.1
			5.2	14.1	5.0
			7.3	13.2	10.0
			8.4	12.5	15.0
			9.2	11.9	20.0
	# 5	12.58	10.1	11.3	25.0
			14.2	11.1	26.8
			0	14.6	0.1
			4.4	14.6	0.1
			6.9	13.8	5.0
			8.3	13.0	10.0
			9.8	12.2	15.0
	#5A	13.07	10.6	11.8	20.0
			13.5	11.2	24.8
			0	14.6	0.0
			9.9	14.6	0.0
			11.8	13.7	5.0
			12.6	-	10.0
			12.9	-	15.0
	Sandheads	13.53	13.1	-	17.5
			0	14.8	0.1
			0.2	14.8	0.1
			1.8	14.6	5.0
			2.3	14.7	10.0
			2.8	14.8	15.0



SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity(‰)
23/9/76	Sandheads	13.53	3.2	14.6	15.2
			3.5	-	15.0
			5.2	13.3	20.0
			6.6	11.5	25.0
			10.2	11.4	26.5
	# 3	13.58	0	14.8	0.0
			0.3	14.7	0.0
			3.5	14.0	5.0
			4.5	13.6	10.0
			5.5	12.9	15.0
			6.8	11.9	20.0
			7.1	11.5	25.0
			13.7	10.8	27.7
	# 5	14.02	0	12.7	0.0
			2.6	11.9	5.0
			5.1	11.4	10.0
			6.2	10.6	15.0
			7.3	9.8	20.0
			8.1	9.3	25.0
			14	9.0	27.2
	#5A	14.08	0	14.7	0.0
			2.4	14.4	0.0
			4.5	14.0	5.0
			6.2	13.4	10.0
			7.3	12.6	15.0
			8.6	12.0	20.0
			9.7	11.3	25.0
			14.5	11.2	26.4
	# 7	14.12	0	14.6	0.0
			4	14.6	0.0
			9.6	14.0	5.0
			12.4	13.2	10.0
			13.4	12.2	15.0
			13.8	11.3	20.0
			17	11.2	25.0
			18.2	11.2	25.3
			19.7	11.2	25.3
	BnB	14.15	0	14.6	0.0
			4.5	14.6	0.0
			6.1	13.7	5.0
			8.8.	13.2	10.0
			12	12.1	15.0
			13.1	11.9	20.0
			23.5	11.4	24.1
	#11	14.20	0	14.6	0.0
			5.7	14.6	0.0
			7.5	13.8	5.0
			9.4	13.0	10.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER - 1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity(‰)
23/9/76	#11	14.20	10.6	12.4	15.0
			12.9	11.8	20.0
			17.3	11.6	21.9
	#13	14.24	0	14.6	0.0
			10.3	14.6	0.0
			10.9	14.3	2.6
			11.4	14.4	0.4
			11.8	14.2	2.5
			13.3	14.0	5.0
			13.7	13.0	10.0
			14.1	13.0	12.5
	#S15	14.27	0	14.6	0.0
			13	14.6	0.0
	Sandheads	15.10	0	14.8	0.0
			-	14.4	5.0
			-	14.4	10.0
			0.35	14.2	15.0
			4	13.8	20.0
			9.7	11.6	25.0
			10.8	11.4	26.3
	# 3	15.18	0.9	14.4	0.0
			2.7	14.3	5.0
			5.2	14.8	10.0
			6	14.4	15.0
			7	12.3	20.0
			15.1	11.5	25.0
	#3A	15.20	0	14.5	0.0
			0.3	14.5	5.0
			0.7	14.5	10.0
			3.1	14.6	15.0
			6.7	13.5	20.0
			12.1	11.8	25.0
	# 5	15.25	16.6	11.2	26.9
			0	14.8	0.0
			2.4	14.2	5.0
			3	14.6	10.0
			4	14.6	15.0
			7.7	12.6	20.0
			9.3	11.4	25.0
			15.3	11.2	26.9
	#5A	15.27	0	14.6	0.0
			3	14.5	5.0
			4.4	14.3	10.0
			7	13.6	15.0
			7.7	13.0	20.0
			9.3	11.5	25.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER-1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity(‰)
23/9/76	#11	15.36	0	14.7	0.0
			0.5	14.7	0.0
			3.7	14.7	5.0
			4.5	14.3	10.0
			6.0	13.5	15.0
			8.3	12.7	20.0
			12.7	11.5	25.0
			18.6	11.3	26.2
	#13	15.40	0	14.6	0.2
			3	14.6	0.2
			5	14.1	5.0
			6.3	13.3	10.0
			7	12.7	15.0
			7.9	12.0	20.0
			12.1	11.4	25.0
			15	11.4	25.3
	S19	15.45	0	14.6	0.0
			3.1	14.5	0.0
			7.4	13.8	5.0
			8.5	13.0	10.0
			8.9	12.5	15.0
			10.5	11.9	20.0
			12.9	11.5	21.0
	S21	15.48	0	14.6	0.0
			5.9	14.5	0.0
			10.2	13.2	5.0
			10.4	12.8	10.0
			11.8	12.5	15.0
	Sandheads	18.25	0	14.5	0.0
			0.2	14.5	5.0
			0.25	14.5	10.0
			0.4	14.3	15.0
			1	14.1	20.0
			8.5	11.6	25.0
			11.8	11.2	26.8
	# 3	18.29	0	14.4	0.0
			0.3	14.3	5.0
			0.5	14.2	10.0
			0.8	14.2	15.0
			3.9	14.1	20.0
			11.9	12.0	25.0
			14.6	11.1	26.4
	# 5	18.36	0	14.6	0.0
			0.4	14.5	5.0
			0.5	14.5	10.0
			0.7	14.2	15.0
			6.1	14.0	20.0
			11.7	12.0	25.0
			15.1	11.6	26.0

SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER-1976					
Date	Station	Time (PST)	Depth (M)	Temp (°C)	Salinity (‰)
23/9/76	#5A	18.40	-	14.8	0.0
			-	14.8	5.0
			-	14.7	10.0
			1.8	14.6	15.0
			7	13.7	20.0
			10	12.0	25.0
			15.1	11.7	26.2
	#7A	18.48	0	14.6	0.0
			2.8	15.2	5.0
			3.4	15.2	10.0
			4.7	14.5	15.0
			6.5	13.8	20.0
			10.2	12.0	25.0
			24.8	11.0	26.7
	#11	18.58	0	14.6	0.0
			0.8	14.6	0.0
			3.4	14.9	5.0
			3.8	15.0	10.0
			4.4	14.5	15.0
			6.9	12.6	20.0
			9.3	12.0	25.0
	#13	19.04	17.5	11.6	26.5
			0	14.6	0.0
			0.9	14.6	0.0
			4.4	14.7	5.0
			5	14.6	10.0
			5.6	14.4	15.0
			6.8	12.6	20.0
	S19	19.30	9	12.1	25.0
			13.5	11.6	26.2
			0	14.5	0.0
			1.1	14.5	0.0
			4.5	14.3	5.0
			5.8	14.0	10.0
			6.2	13.4	15.0
	S21	19.36	7	12.5	20.0
			9.5	12.0	25.0
			0	14.5	0.0
			0.7	14.5	0.0
			4	14.2	5.0
			4.9	14.0	10.0
			6.1	12.9	15.0
	S25	19.50	6.6	12.7	20.0
			10.7	11.9	25.0
			11.5	11.9	25.2
			0	14.5	0.0
			2.6	14.5	0.0
			6.3	14.1	5.0
			9.1	13.6	10.0



SALINITY AND TEMPERATURE OBSERVATIONS FRASER RIVER-1976					
Date	Station	Time (PST)	Depth (M)	Temp ( $^{\circ}\text{C}$ )	Salinity ( $^{\circ}/_{\text{oo}}$ )
23/9/76	S25	19.50	10	12.8	15.0
			11.2	12.2	20.0
			12.7	12.1	22.5
	Water Tower	20.09	0	14.5	0.0
			13	14.5	0.0
	Water Tower	21.24	0	14.4	0.0
			13	14.4	0.0

DATE	STATION	TIME (PST)	DEPTH (M)	CONDUCTIVITY	TEMP (°C)	SALINITY (‰)
8/12/76	#S19	0908	0	12.2	6	11.2
			4.7	14	6	13
			4.8	16	6	15
			5.2	20	6	19.2
			7.5	24	7	22.9
			9	27.6	8	26
			12	27.6	8	26
			0	10	6	9
			4	15	6	14.1
			6.8	20	7	18.6
			9.8	25	7	23.9
			12.2	27	8	25.3
	#S23	0922	0	1	6	0.5
			0.3	5	6	4.3
			2.9	10	6	9
			4.6	15	7	13.7
			6.3	20	7	18.7
			11.8	25	8	23.2
			13.5	25	8	23.2
			0.3	7.7	6	6.9
			4.0	10	6	9
			4.2	15	6	14.1
			5.0	20	7	18.7
			8.4	24	7	22.9
	#S27	0946	13	24.8	8	23.0
			0.2	5	5	4.4
			4.5	10	5	9
			5.5	15	6	14
			6.5	20	7	18.7
			11.2	21	7	19.7
	Tunnel	0951	0	2.6	5	2.1
			5.9	5	5	4.4
			7.3	10	5	9
			9.3	15	6	14.1
			16.1	18.5	7	17.2

DATE	STATION	TIME (PST)	DEPTH (M)	CONDUCTIVITY	TEMP (°C)	SALINITY
8/12/76	#S30	0956	0	1.8	5	1.4
			6	5	5	4.4
			9	10	5	9
			14.7	12.6	6	11.6
	#S32	1000	0	1	4	0.8
			5.3	2	4	1.7
			5.4	5	5	4.4
			13	8.2	5	7.5
	#S32	1449	0	0	4	0
			2.4	0	4	0
			8.2	2	4	1.7
			9.4	5	5	4.4
			9.8	10	5	9.3
			10.2	15	6	14.1
			11.5	18	6	17.2
	#S30	1452	0	0	4	0
			8.2	2	4	1.7
			8.6	5	5	4.4
			8.8	10	5	9.3
	#S28	1455	9.2	15	5	14.8
			11.4	20	7	18.7
			15.1	21	7	19.7
			0	0.1	4	0
			7.8	2	4	1.7
			8.2	5	5	4.4
			8.5	10	5	9.3
			9.1	15	6	14.1
	#S27	1501	10.4	20	7	18.7
			15.4	21.5	7	20.3
			0	0.3	4	0
			0.5	0.3	4	0
			3.2	2	5	1.7
			6.8	5	5	4.4
			8	10	5	9.3
			9.3	15	6	14.1

DATE	STATION	TIME (PST)	DEPTH (M)	CONDUCTIVITY	TEMP (°C)	SALINITY (‰)
8/12/76	#S27 (Cont)	1501 (Cont)	10.1	20	7	18.7
			11	21.8	7	20.6
	Water Tower	1510	0	0.9	5	0.7
			4.1	2	5	1.7
			5.5	3	5	4.4
			5.8	10	5	9.3
			5.9	15	5	14.5
			6.7	20	7	18.7
			11.7	24	7	22.9
			15	24.3	8	22.5
	#S25	1519	0	1	5	0.8
			2	2	5	1.7
			4	5	5	4.4
			5.4	10	6	9
			6.2	15	6	14.1
			6.9	20	6	19
			8.3	25	7	23.9
			12.2	26.9	8	25.2
	#S21	1527	0	1.3	5	1
			0.8	2	5	1.7
			2.5	5	5	4.4
			3.1	10	5	9.3
			4.2	15	6	14.1
			5.2	20	7	18.7
			8.8	25	7	23.9
			12	26.8	8	25.1
	#S16	1533	0	2.4	5	2.5
			0.6	4	5	3.5
			1.8	5	5	4.4
			4.5	10	6	9
			5.2	15	6	14.1
			5.4	20	6	19.2
			6.9	25	7	23.9
			12	28	8	26.3



DATE	STATION	TIME (PST)	DEPTH (M)	CONDUCTIVITY	TEMP (°C)	SALINITY (‰)
8/12/76	#S14	1536	0	4.4	5	3.9
			0.6	5	5	4.4
			3.9	10	6	9.0
			4.6	15	6	14.1
			4.9	20	6	19.2
			6.7	25	7	23.9
			12.5	28.3	8	26.6
	#S12	1540	0	0.5	5	0.4
			0.6	5	5	4.4
			4	10	6	9
			4.6	15	6	14.1
			5.1	20	6	19
			6.7	25	7	23.9
			13.6	28.6	8	26.9
	#S8	1545	0	0.7	5	0.5
			0.1	5	5	4.4
			1.2	10	6	9
			3.7	15	6	14.1
			4.4	20	7	18.7
			5	25	7	23.9
			7.2	28	8	26.3
			14.7	28.7	8	27

DATE	STATION	TIME (PST)	DEPTH (M)	CONDUCTIVITY	TEMP (°C)	SALINITY (‰)
22/12/76	#S21	1015	0	4.6	5	4
			0.3	5.0	5	4.4
			0.7	10	5	9.3
			1.5	15.0	6	14.1
			2	20.0	6	19.2
			7.2	25.0	7	23.9
			9.2	28.0	8	26.3
	#S25	1021	0	5	4	4.6
			2	10	5	9.3
			3.4	15	5	14.5
			4.5	20	6	19.2
			8.4	25	7	23.9
			13.4	25.5	7	24.4
	#S27	1038	0	1.2	4	1.0
			4.2	5.0	5	4.4
			5.5	10.0	5	9.3
			6.5	15.0	6	14.1
			7.6	20.0	6	19.2
			12.3	24.7	7	23.6
	Deas Island	1044	0	0	4	0
			3.4	1	4	0.8
			5.0	5	5	4.4
			5.7	10	5	9.3
			7.0	15	6	14.1
			9.7	20	6	19.2
			13.7	22.3	7	21.1
	#S28	1047	0	0.2	4	0.2
			5	1	4	0.8
			6.4	5	4	4.6
			7.5	10	5	9.3
			8.8	15	6	14.1
			10.6	20	6	19.2
			15.3	21	7	19.7

DATE	STATION	TIME (PST)	DEPTH (M)	CONDUCTIVITY	TEMP (°C)	SALINITY (‰)
22/12/76	#S32	1052	0	0.27	4	0.3
			7.2	1	4	0.8
			7.6	5	4	4.6
			8.6	10	5	9.3
			12.7	14.6	6	13.7
	#S21	1148	0	1.5	5	1.2
			2.5	5.0	5	4.4
			3.6	10	6	9
			4.5	15	6	14.1
			6.2	20	7	18.7
	#S25	1414	8.3	25	7	23.9
			10	26.3	8	24.6
			0	1.2	5	1.0
			3.9	5	5	4.4
			5.5	10	6	9.0
	Water Tower	1420	7.5	15	6	14.1
			8.6	20	7	18.7
			10.5	25	8	23.2
			0	0.7	5	0.6
			0.3	1.0	5	0.8
			5.4	5	5	4.4
			7.5	10	5	9.3
			7.7	15	6	14.1
			8.1	20	7	18.7
			10.9	25	8	23.2
	#S27	1430	0	0.4	4	0.3
			2.7	1	4	0.8
			7.6	5	5	4.4
			9.6	9	5	8.3
			0	0.2	4	0.2
	#S28	1440	5.4	0.2	4	0.2
			8	1	4	0.8
			8.9	5	5	4.4
			9.8	10	5	9.3
			11.1	15	6	14.1
			14.6	19.9	7	18.6







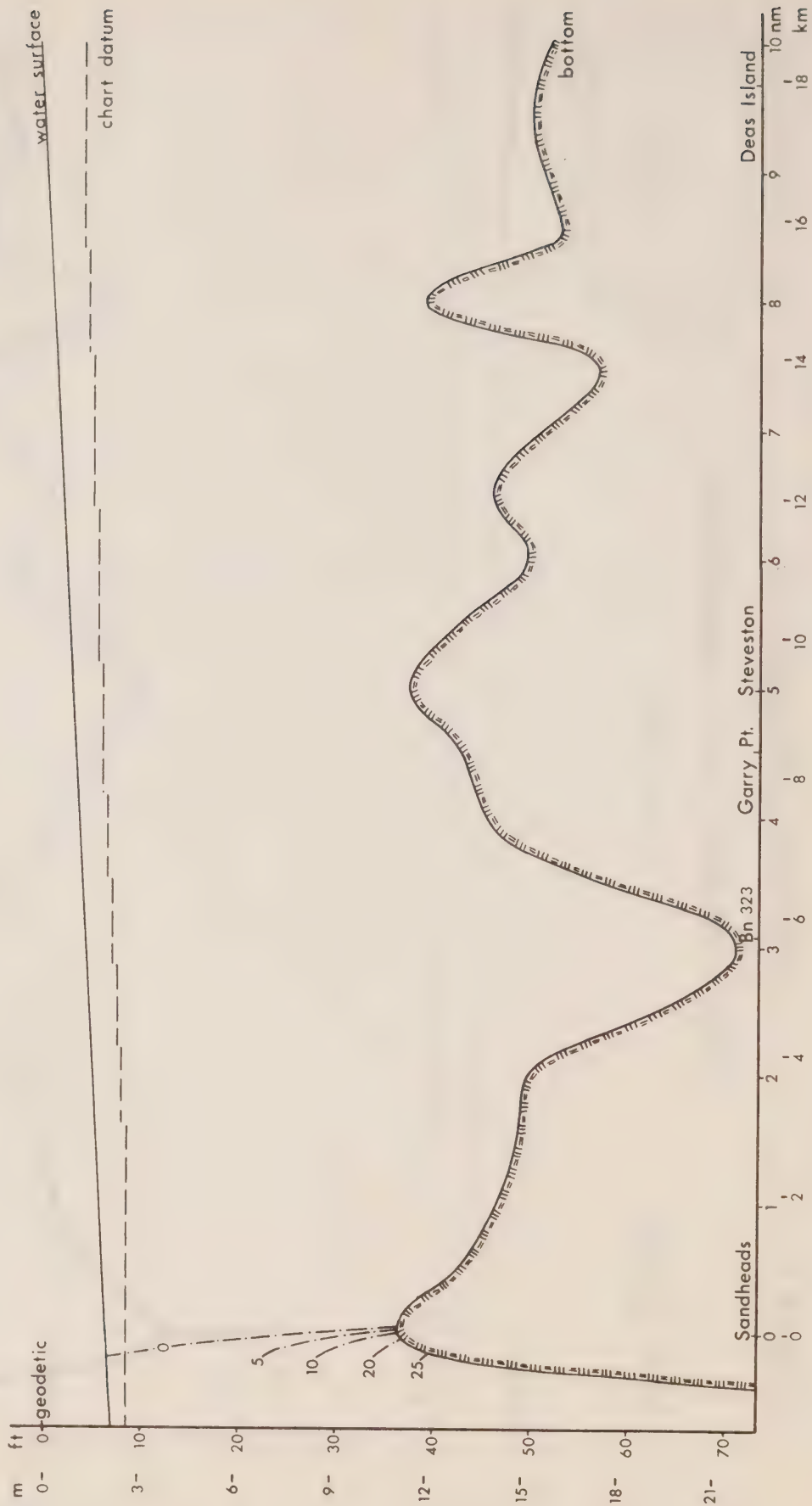
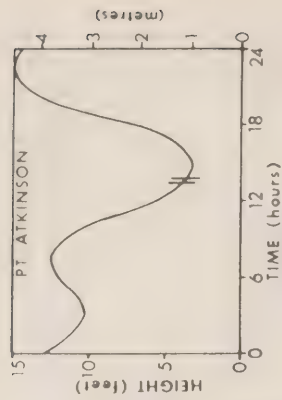


Figure 6

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

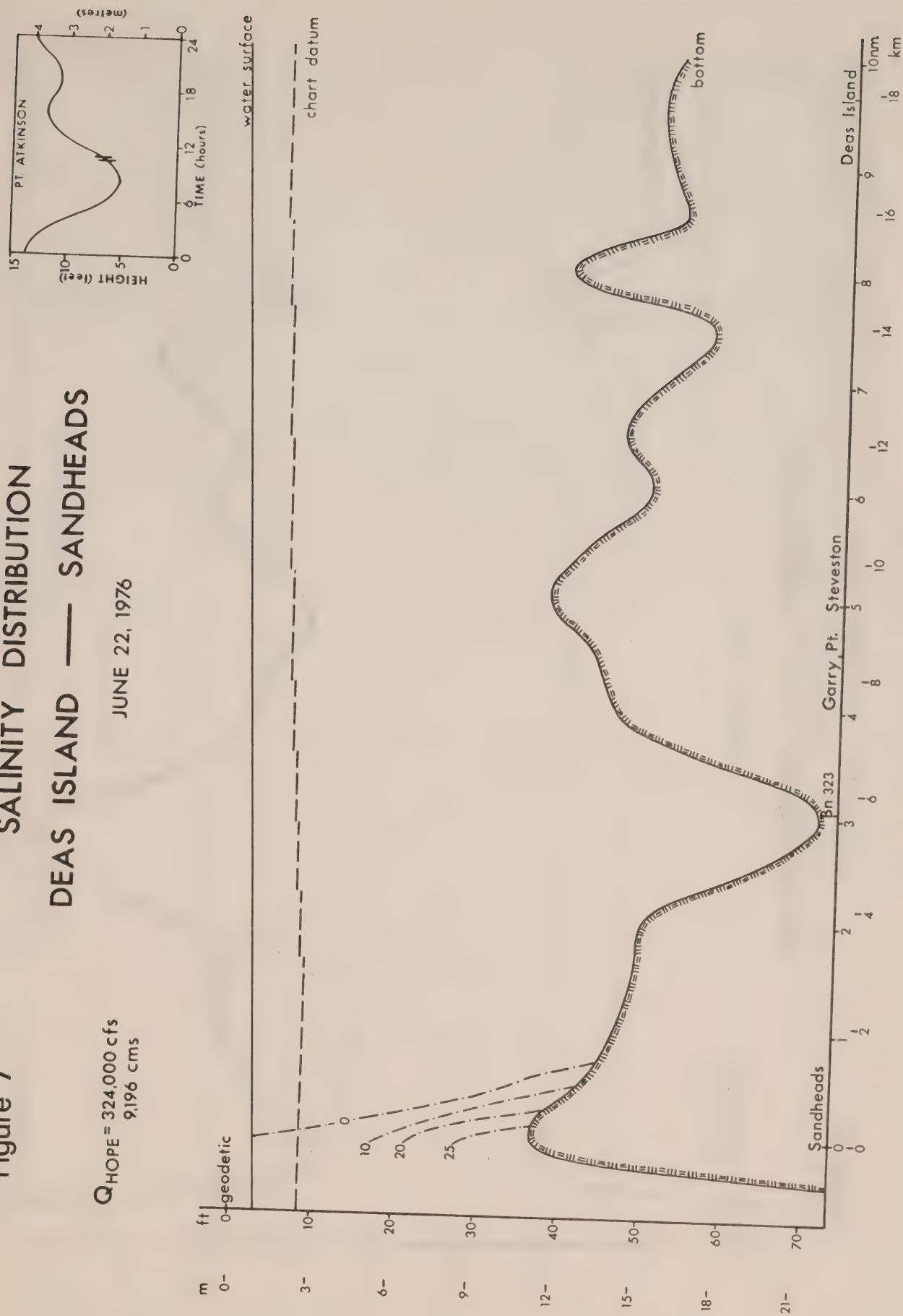
$Q_{HOPE} = 285,000 \text{ cfs}$   
 $8,066 \text{ cms}$

MAY 18, 1976



SALINITY DISTRIBUTION  
DEAS ISLAND — SANDHEADS

JUNE 22, 1976





SALINITY DISTRIBUTION  
DEAS ISLAND — SANDHEADS

JUNE 22, 1976



Figure 9

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 324,000 \text{ cfs}$   
9,196 cms

JUNE 22, 1976

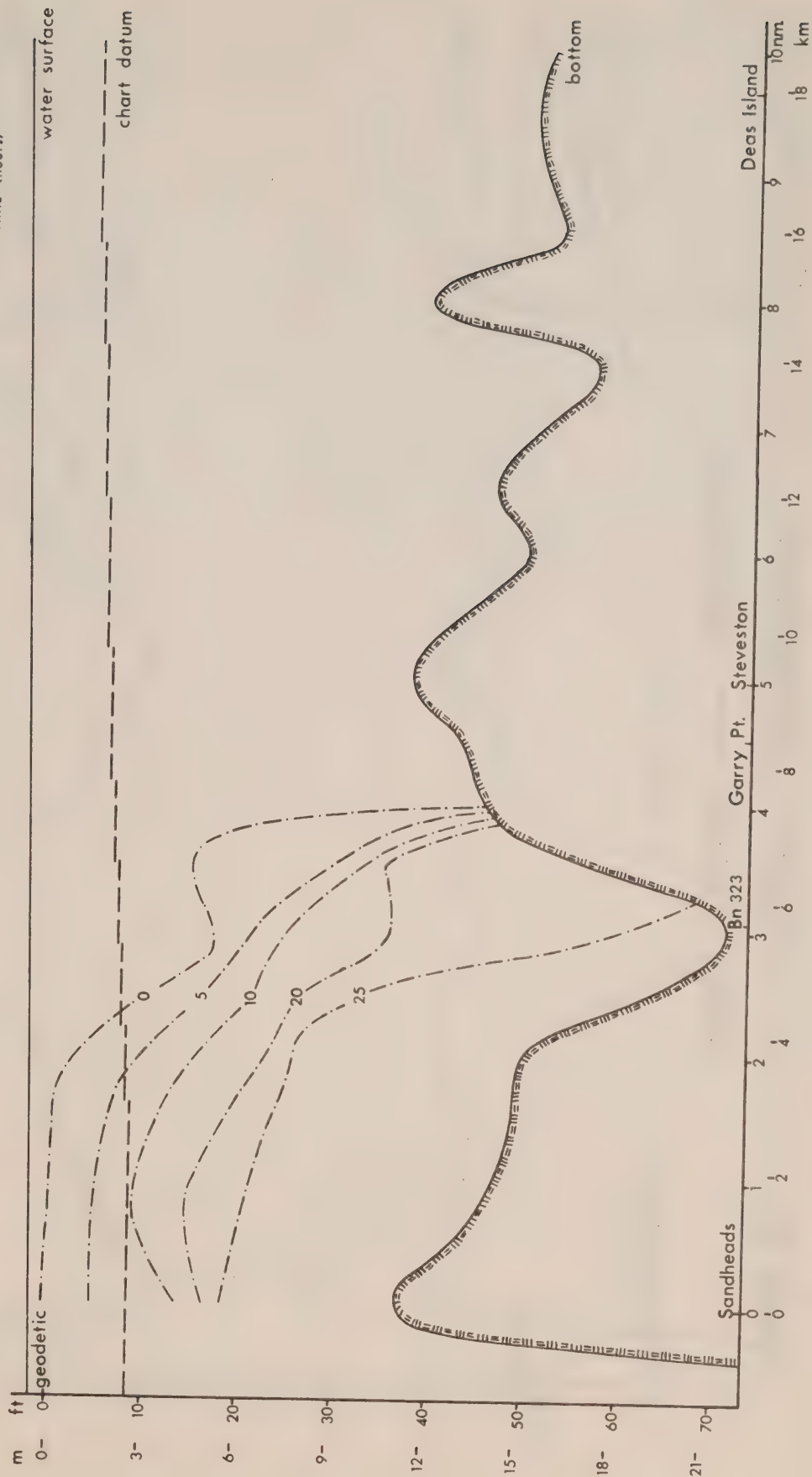
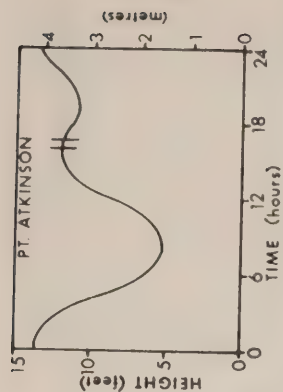


Figure 10

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 284,000 \text{ cfs}$   
 $8,037 \text{ cms}$

JUNE 29, 1976

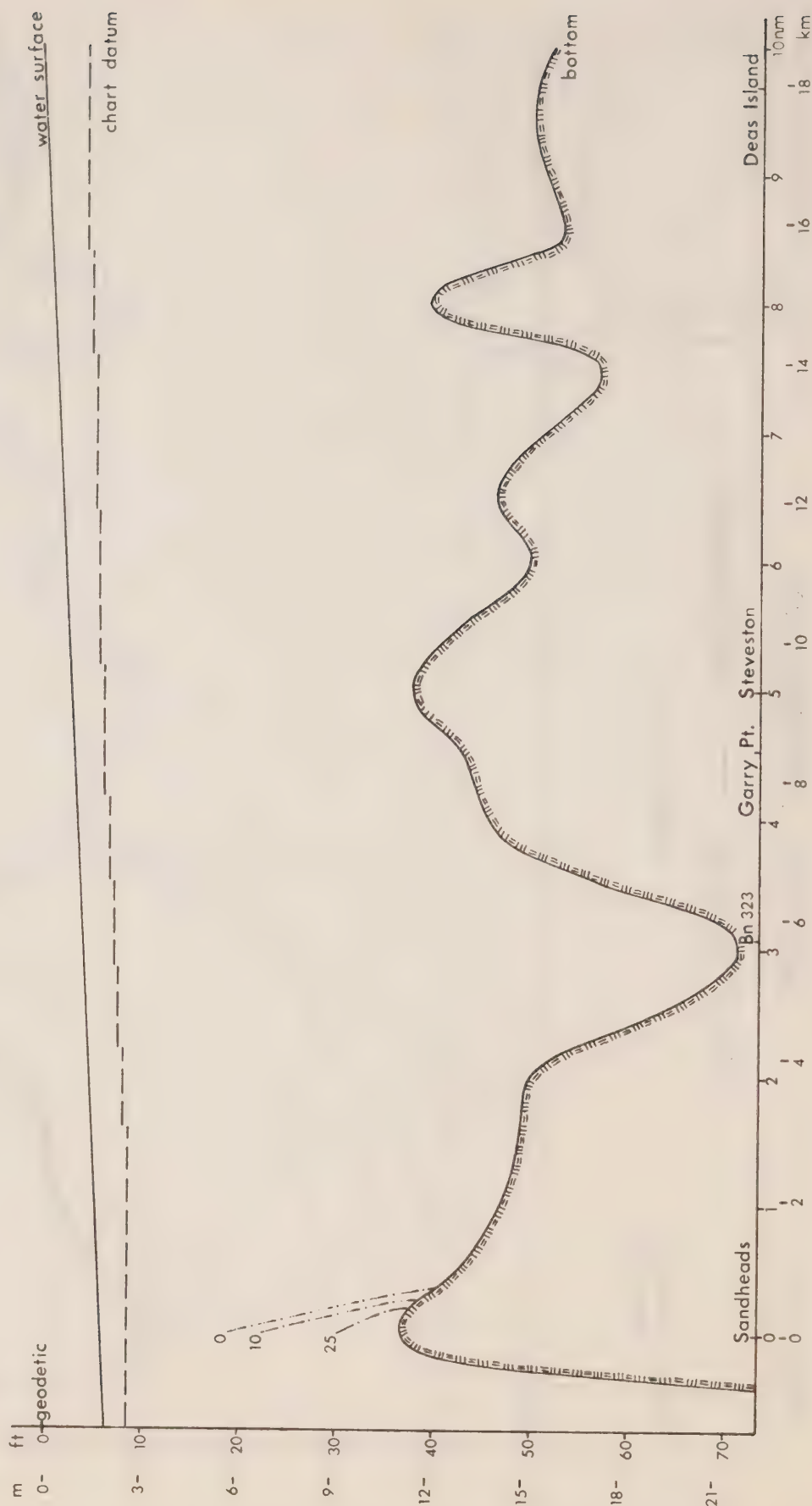
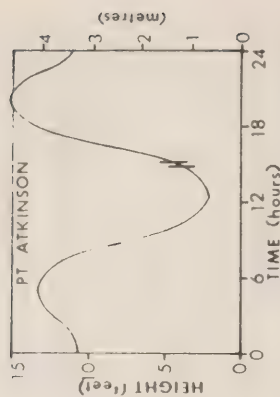


Figure 11

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 284,000 \text{ cfs}$   
 $8,037 \text{ cms}$

JUNE 29, 1976

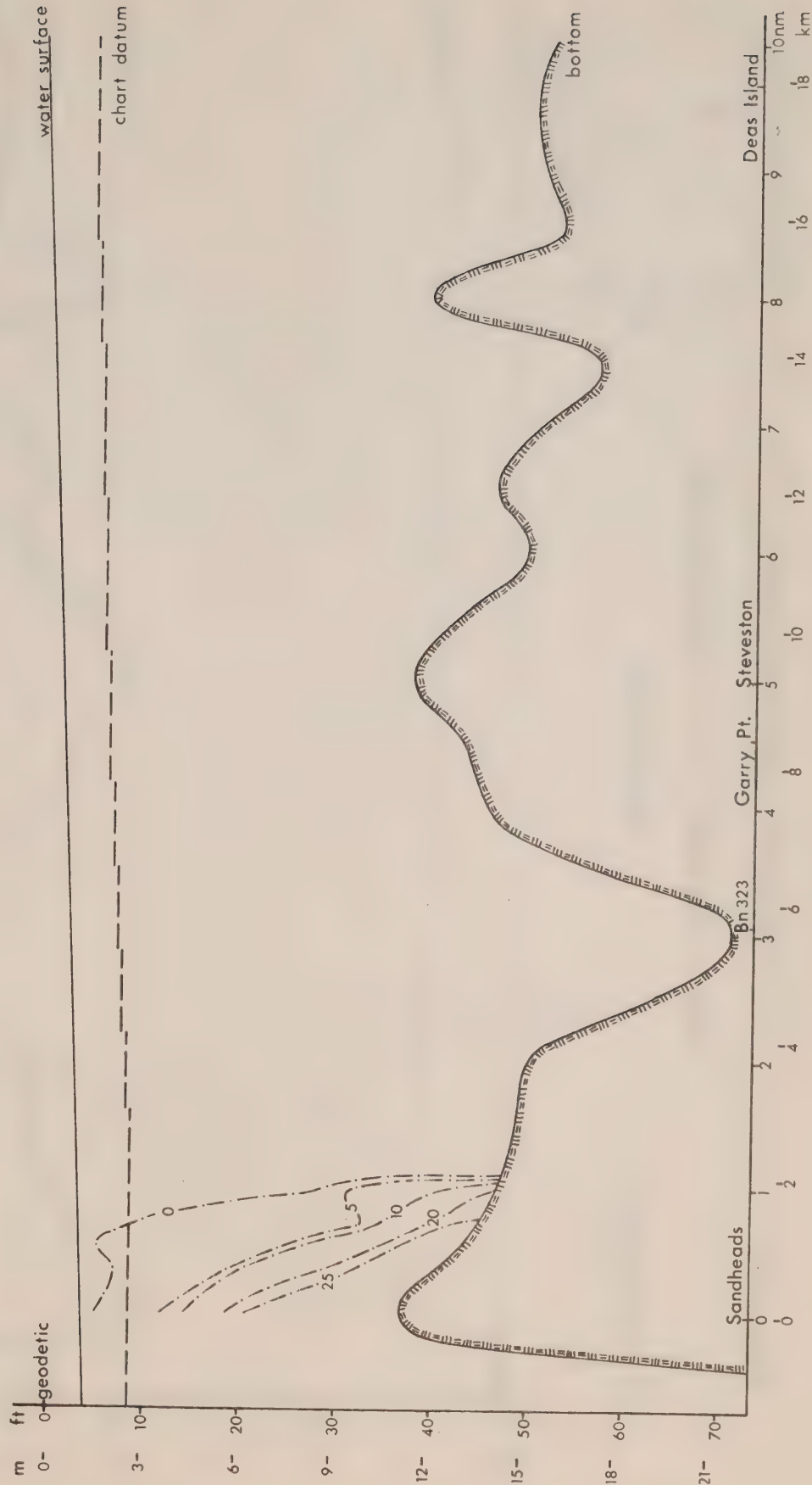
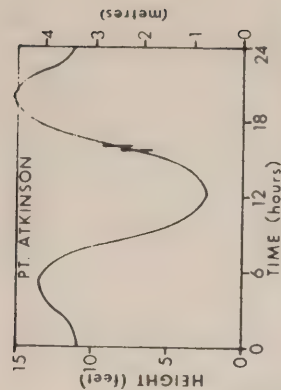


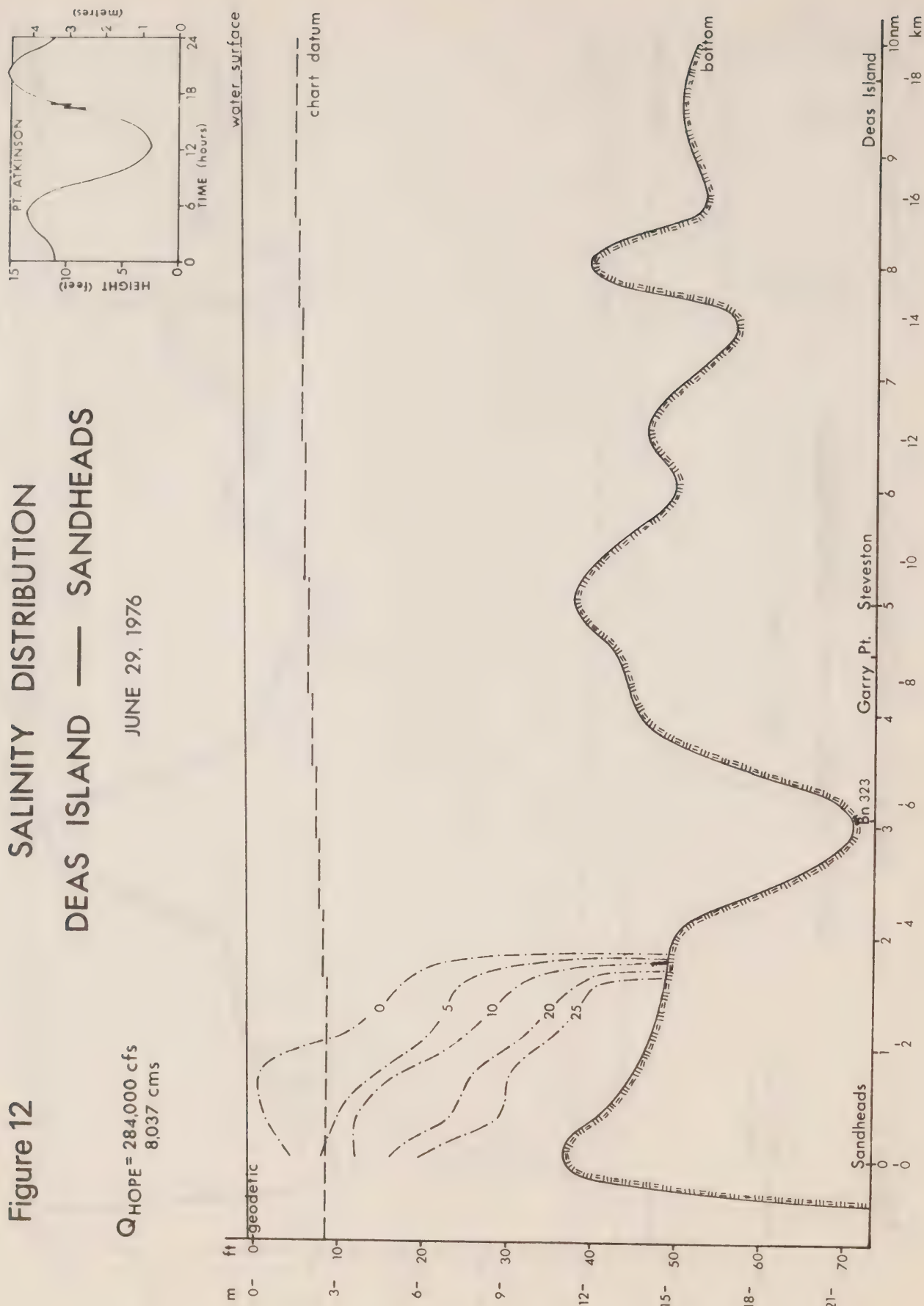


Figure 12

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 284,000 \text{ cfs}$   
 $8,037 \text{ cms}$

JUNE 29, 1976



SALINITY DISTRIBUTION  
DEAS ISLAND — SANDHEADS

JUNE 29, 1976



Figure 14

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 284,000 \text{ cfs}$   
 $8037 \text{ cms}$

JUNE 29, 1976

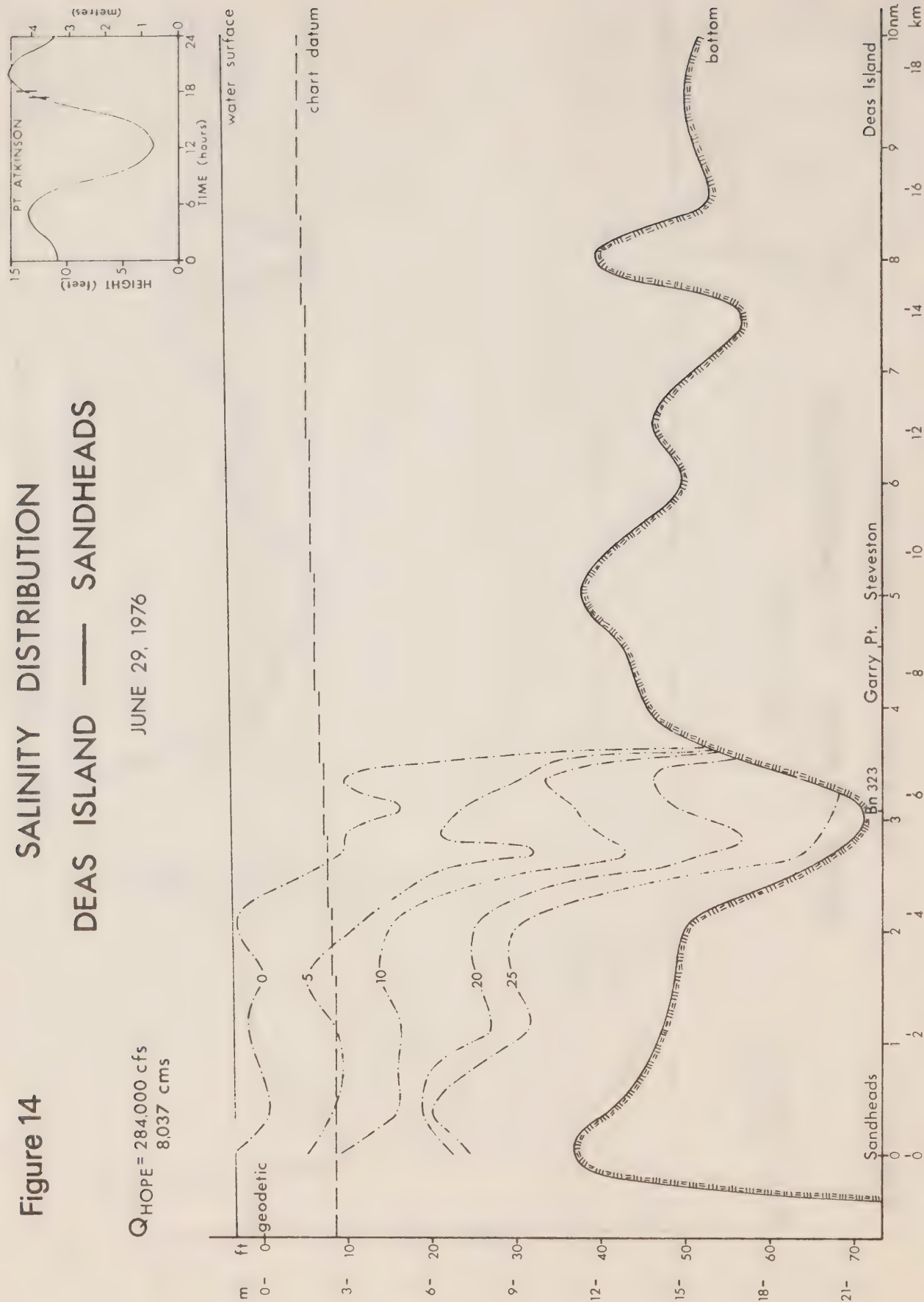


Figure 15

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 284,000 \text{ cfs}$   
 $8.037 \text{ cms}$

JUNE 29, 1976

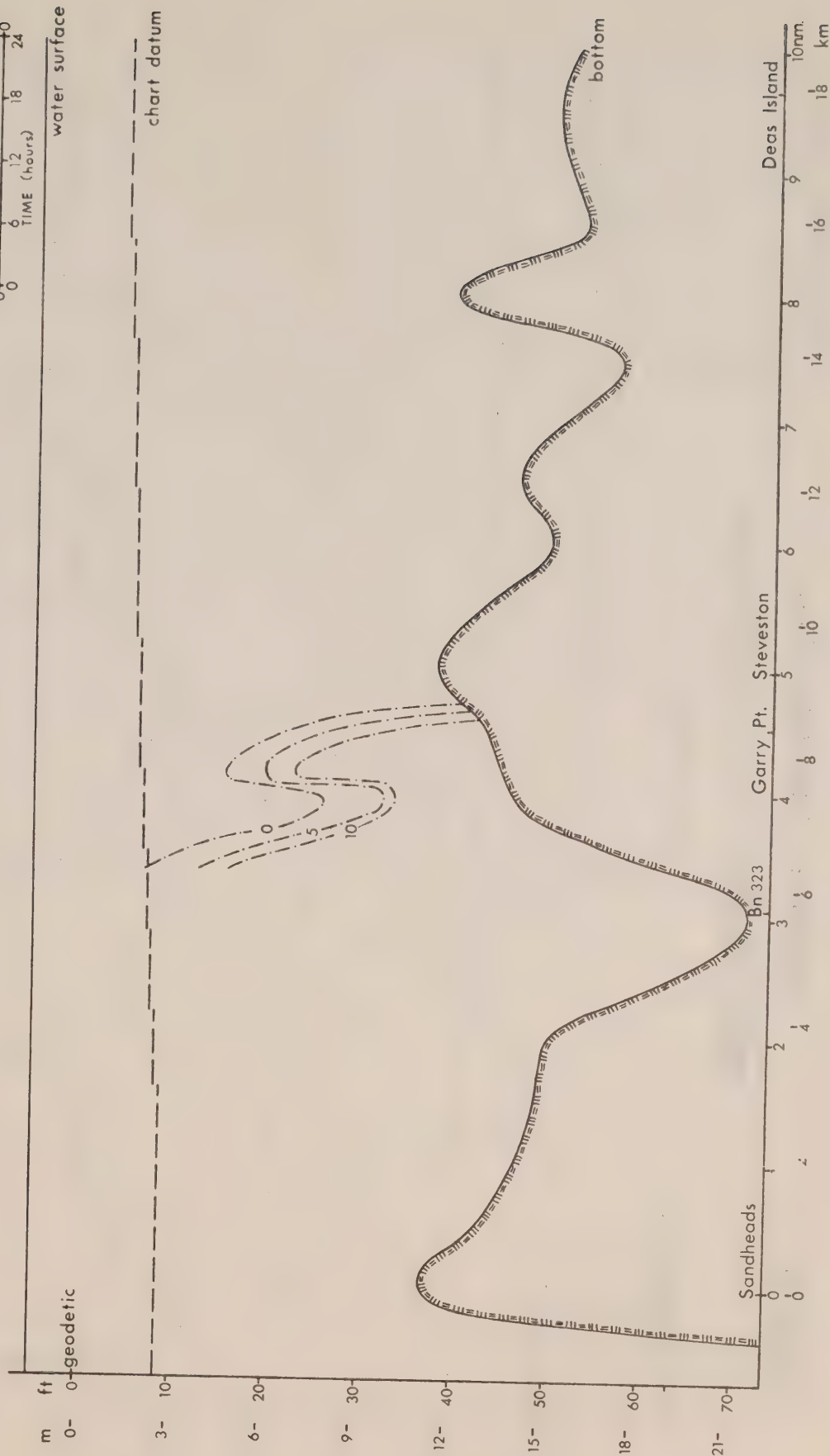
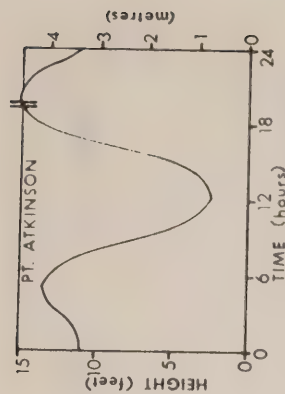




Figure 16

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 284,000 \text{ cfs}$   
 $8037 \text{ cms}$

JUNE 29, 1976

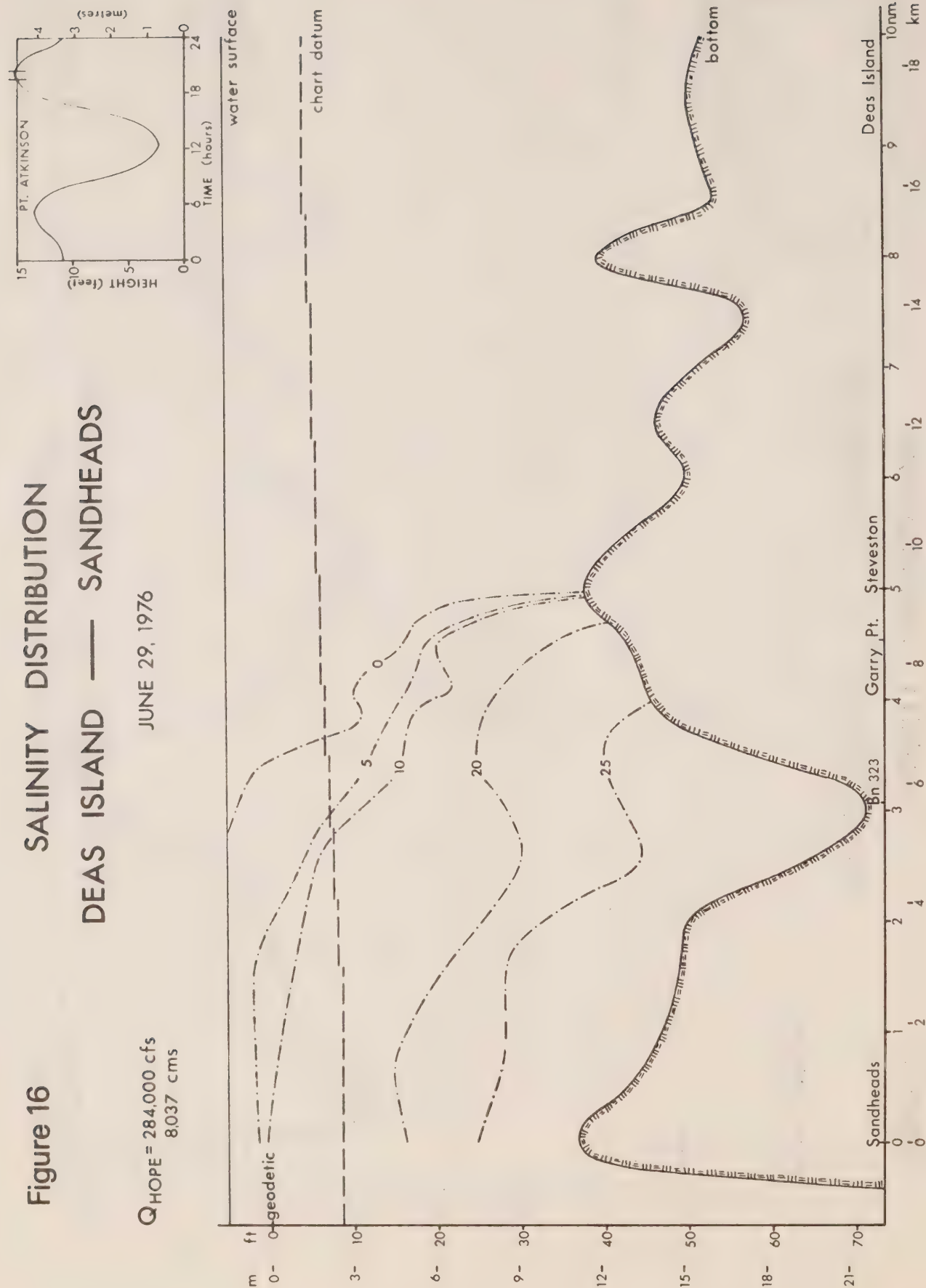


Figure 17

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 284,000 \text{ cfs}$   
 $8037 \text{ cms}$

JUNE 29, 1976

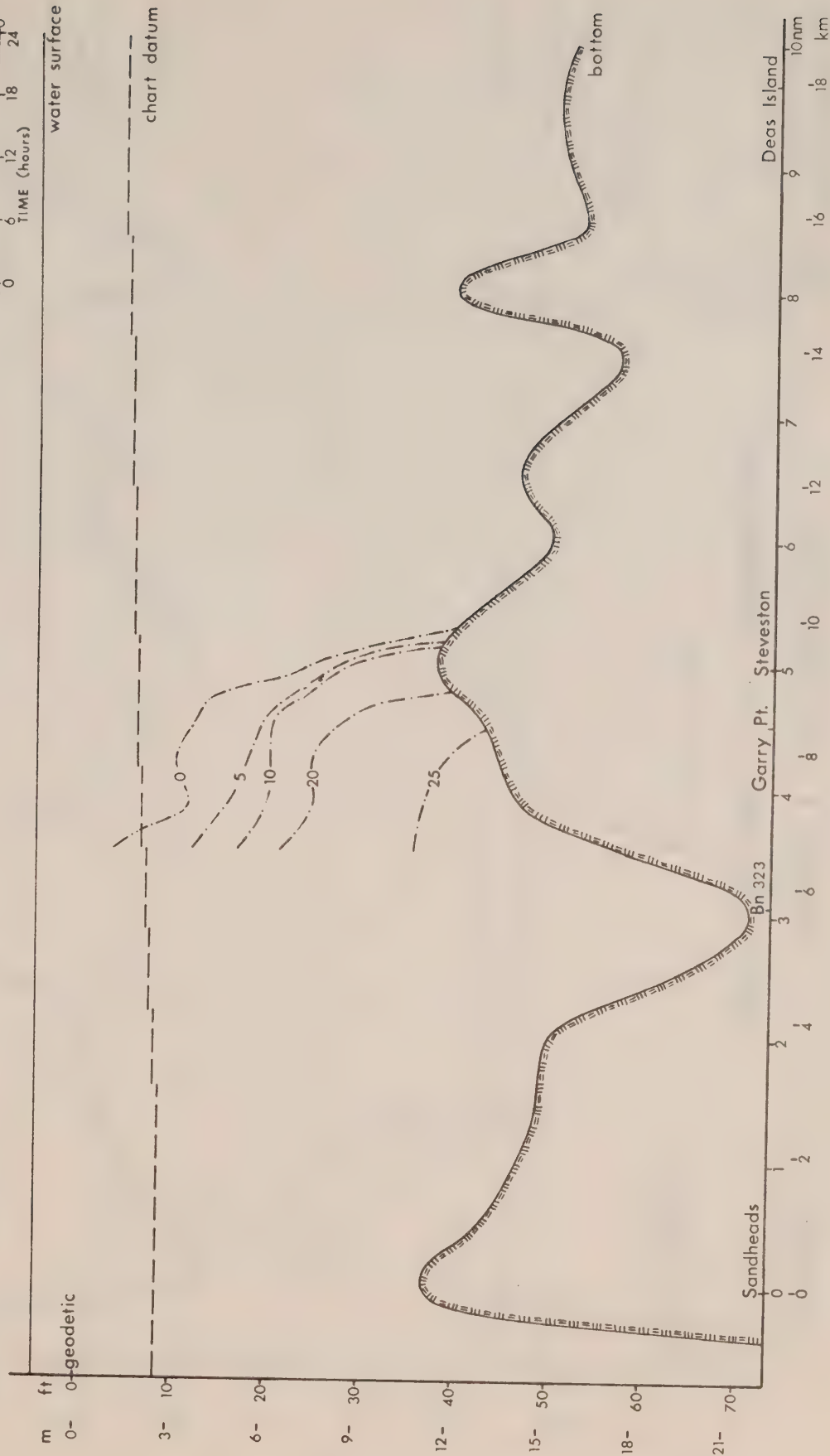
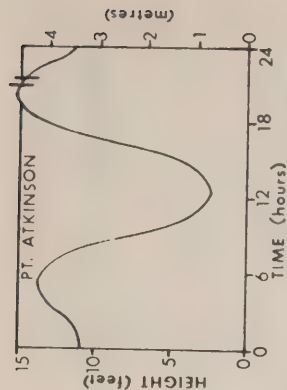


Figure 18

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 220,000 \text{ cfs}$   
 $6,226 \text{ cms}$

AUGUST 4, 1976

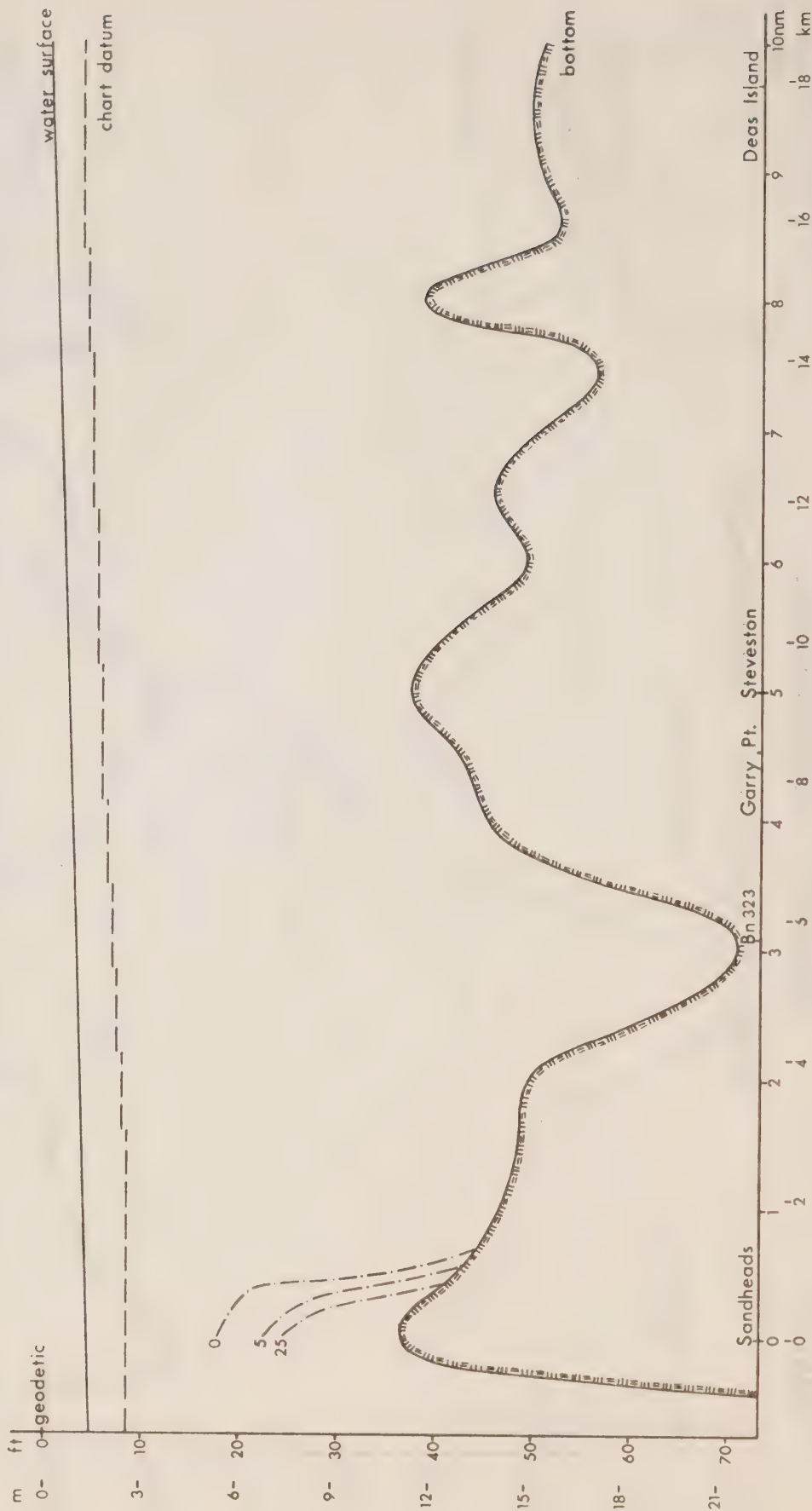
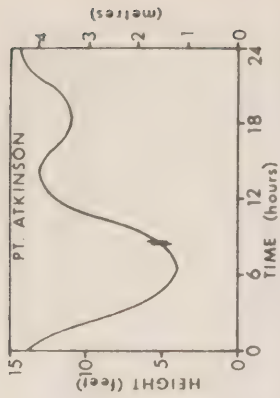


Figure 19

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 220,000 \text{ cfs}$   
6,226 cms

AUGUST 4, 1976

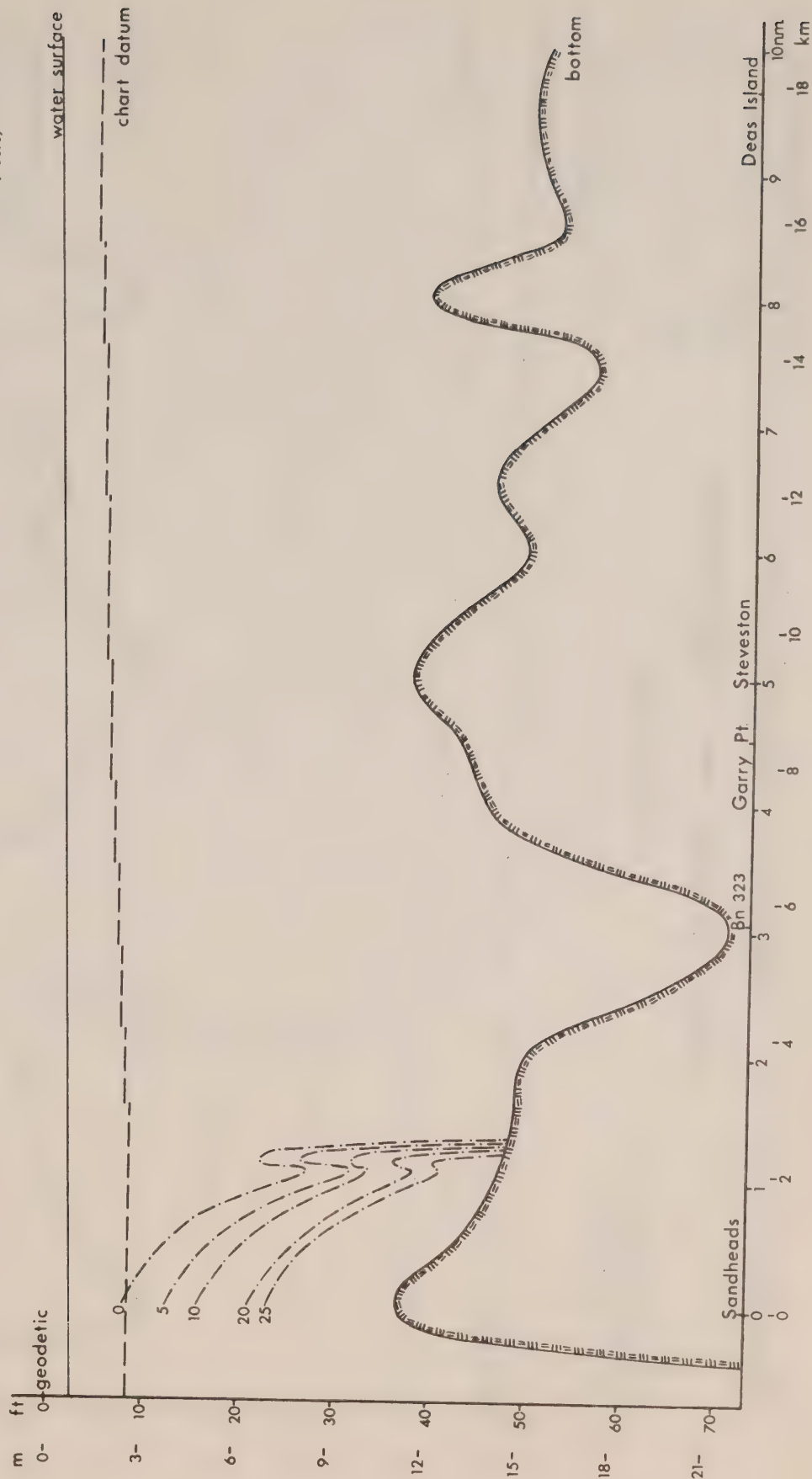
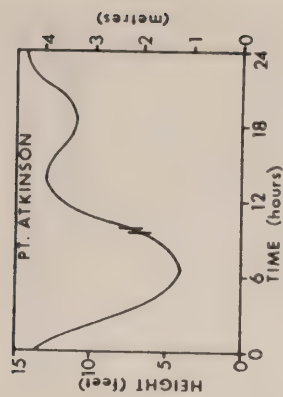




Figure 20

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

AUGUST 4, 1976

$Q_{HOPE} = 220,000 \text{ cfs}$   
6,226 cms

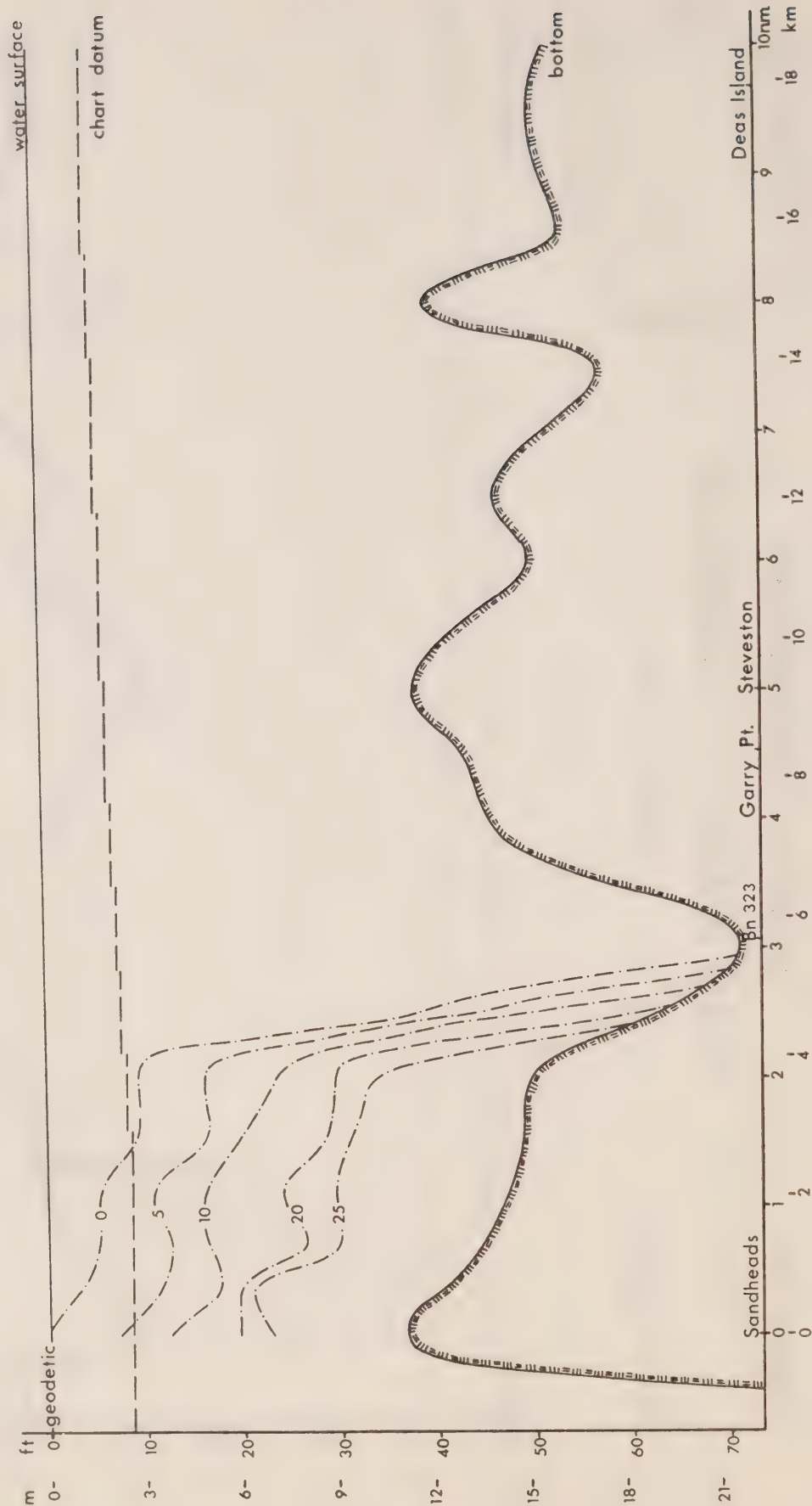
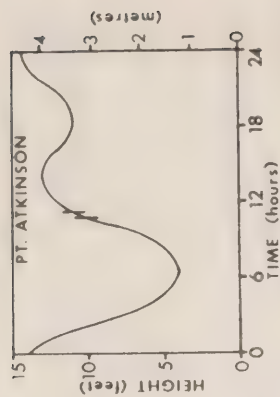


Figure 21

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

AUGUST 4, 1976

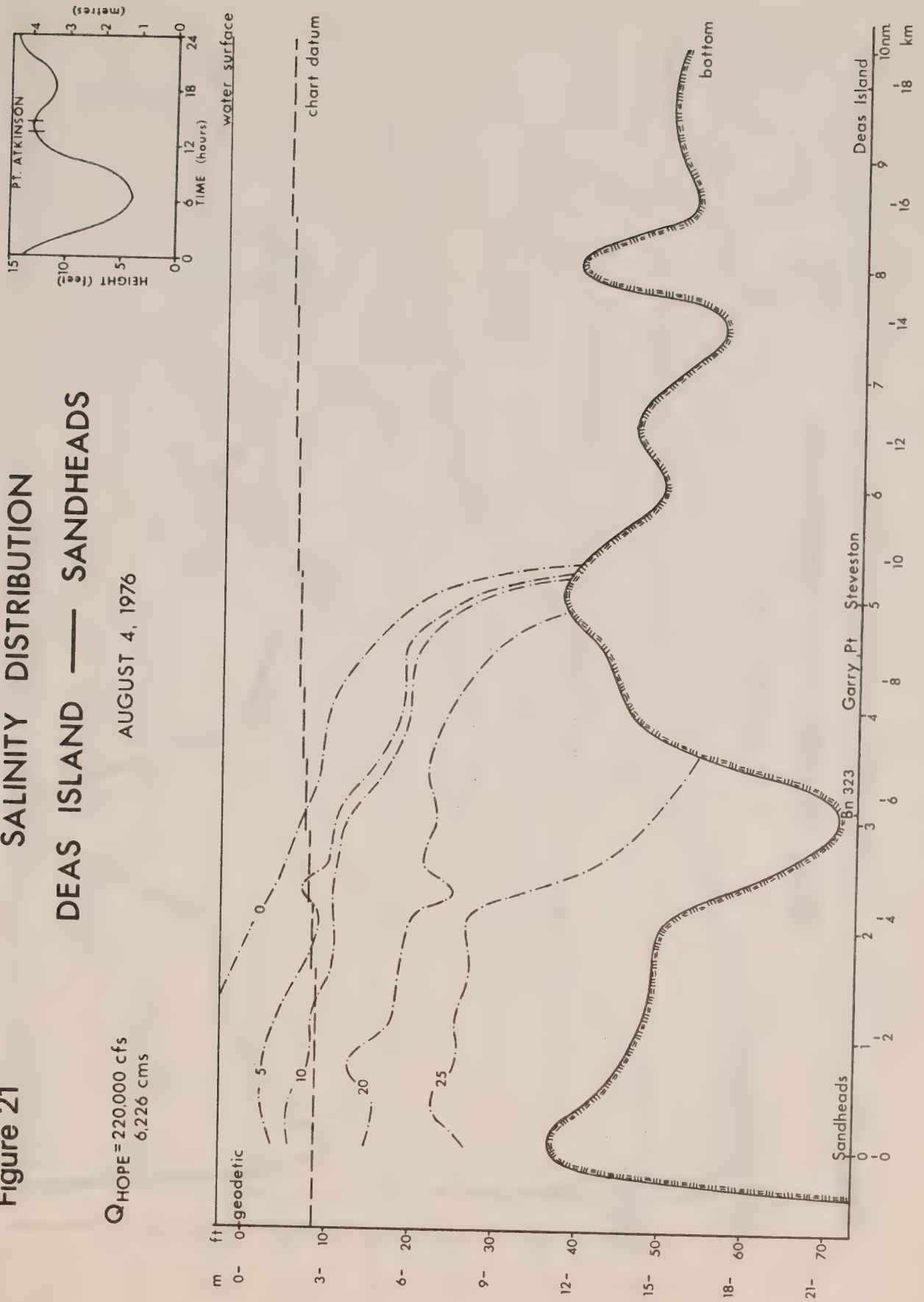
 $Q_{HOPE} = 220,000 \text{ cfs}$   
 $6,226 \text{ cms}$ 


Figure 22

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 220,000 \text{ cfs}$   
6,226 cms

AUGUST 4, 1976

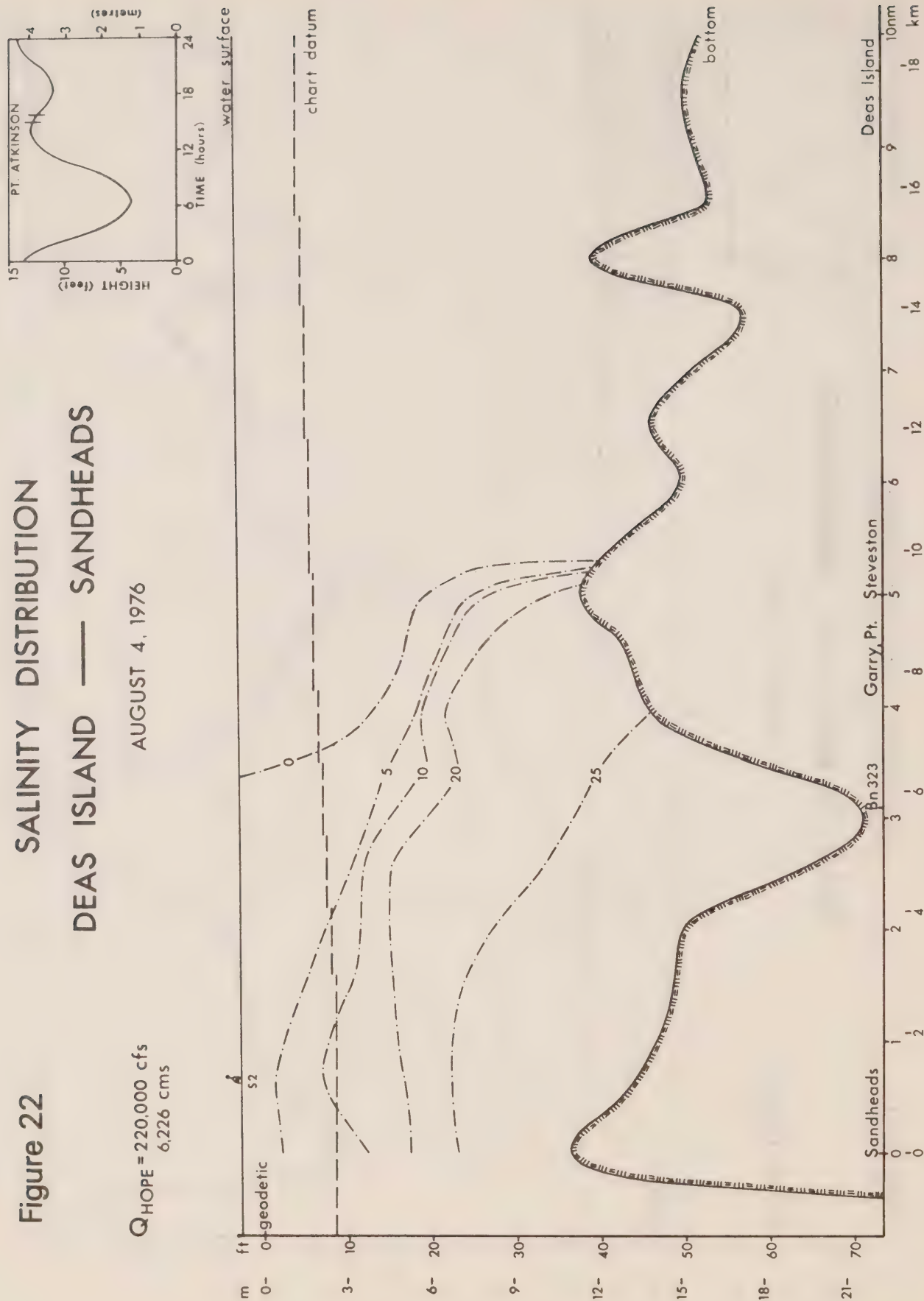


Figure 23

# SALINITY DISTRIBUTION CROSS SECTION AT BUOY S2

$Q_{HOPE} = 220,000 \text{ cfs}$   
 $6,226 \text{ cms}$

AUGUST 4, 1976

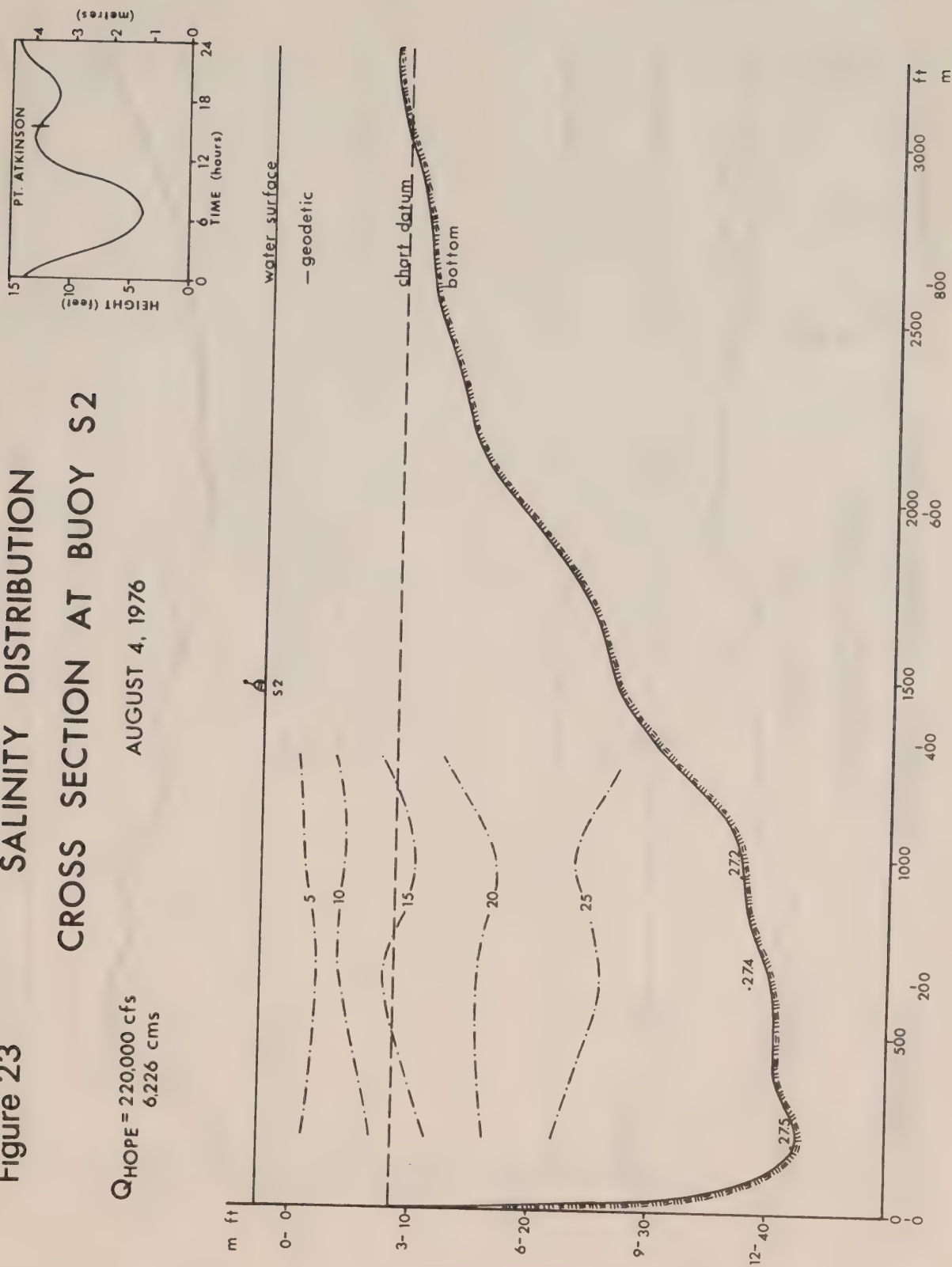




Figure 24

# SALINITY DISTRIBUTION STEVESTON AREA

$Q_{HOPE} = 220,000 \text{ cfs}$   
 $6,226 \text{ cms}$

AUGUST 4, 1976

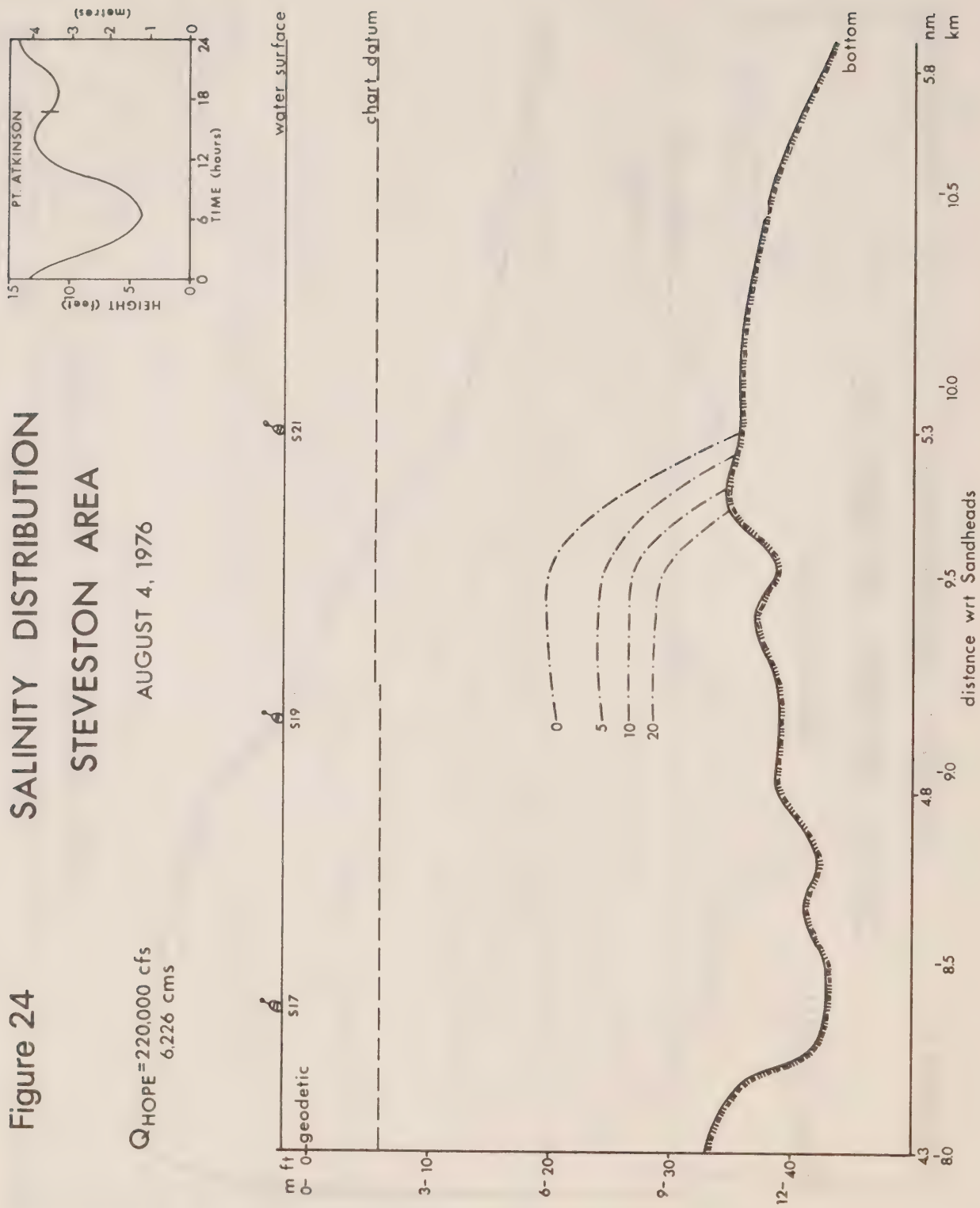
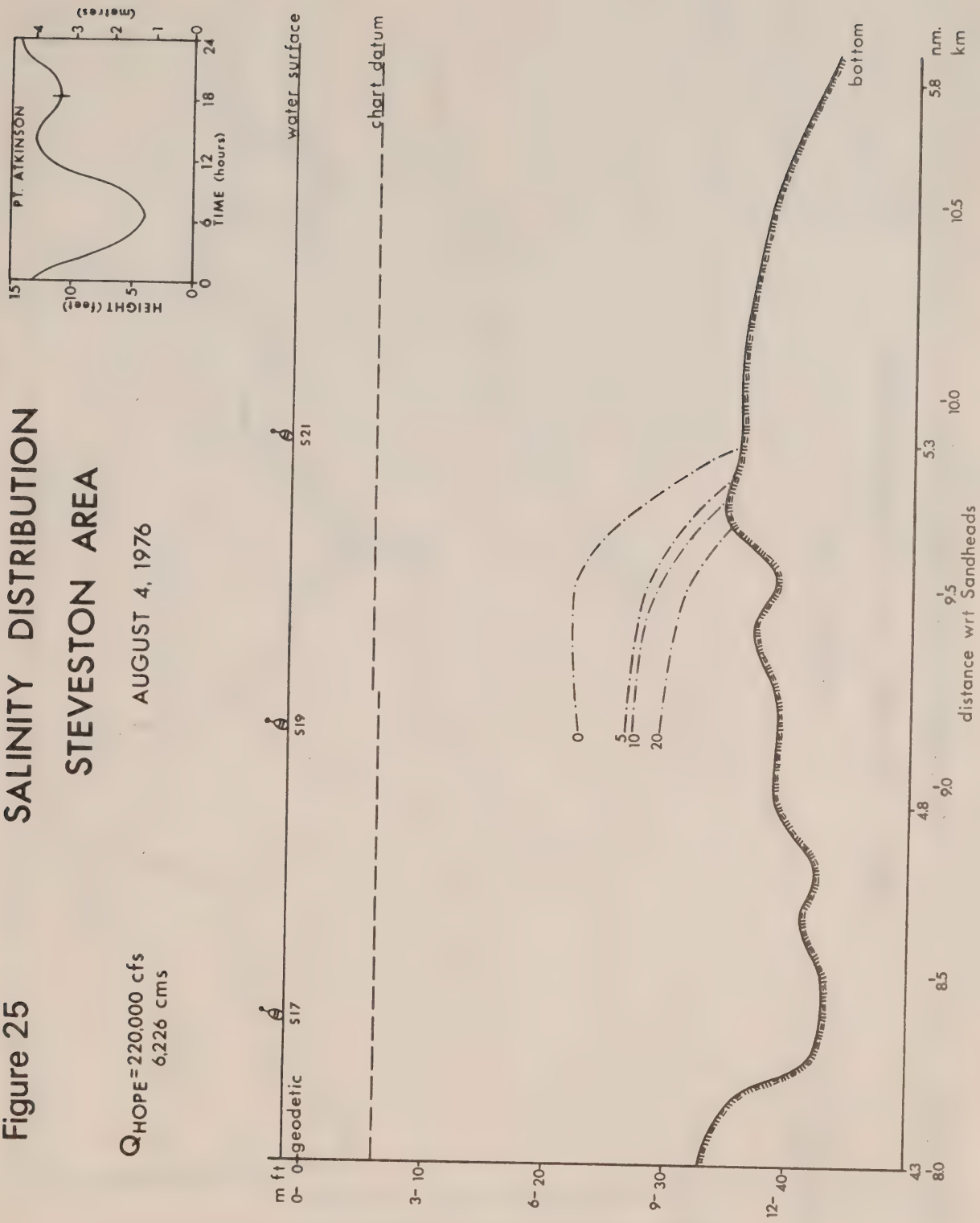


Figure 25

# SALINITY DISTRIBUTION STEVESTON AREA

$Q_{HOPE} = 220,000 \text{ cfs}$   
 $6,226 \text{ cms}$

AUGUST 4, 1976



SALINITY DISTRIBUTION  
DEAS ISLAND — SANDHEADS

$$Q_{\text{HOPE}} = 220,000 \text{ cfs}$$

$$6,226 \text{ cms}$$

AUGUST 4, 1976

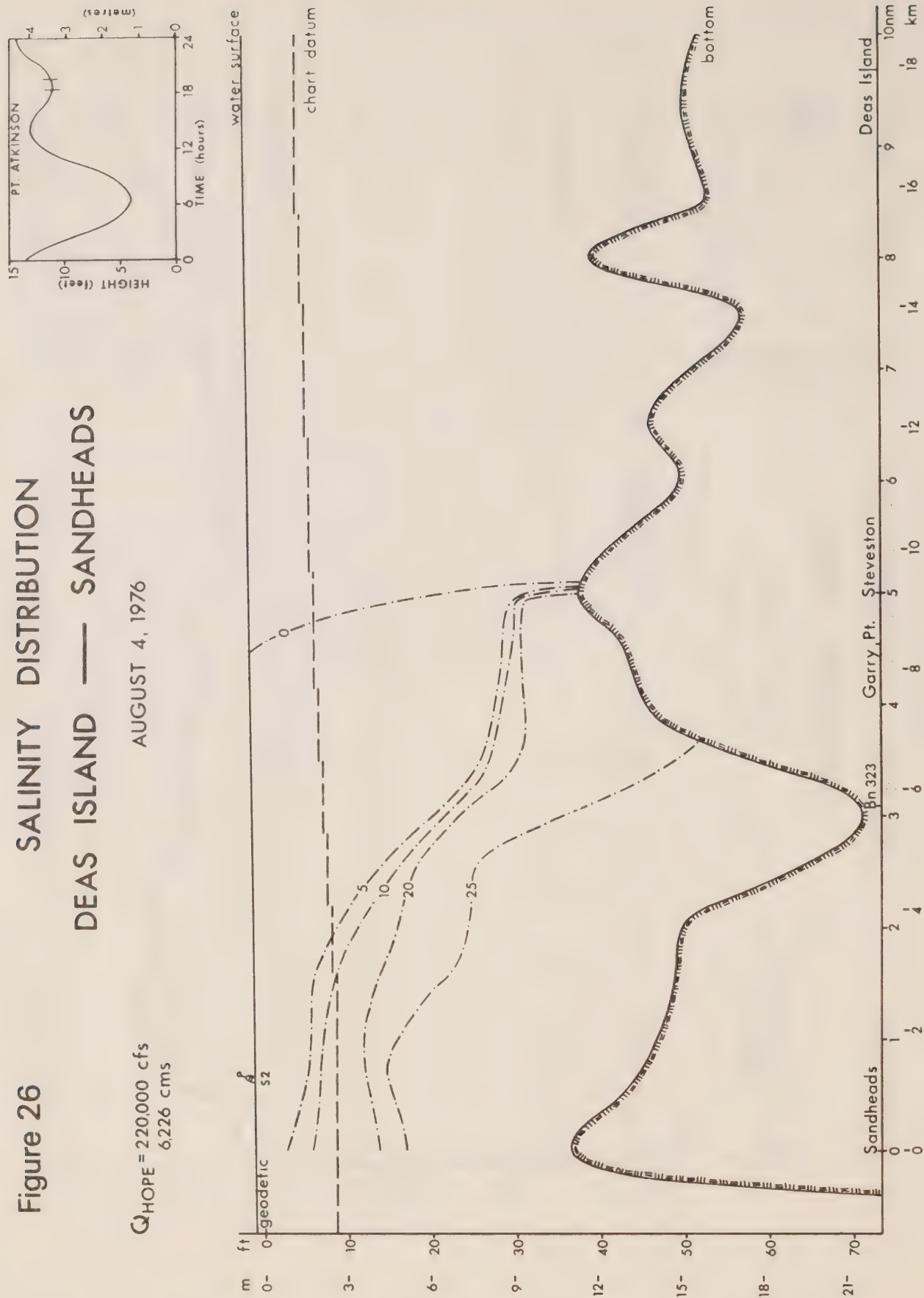


Figure 27

# SALINITY DISTRIBUTION CROSS SECTION AT BUOY S2

$Q_{HOPE} = 220,000 \text{ cfs}$   
6,226 cms

AUGUST 4, 1976

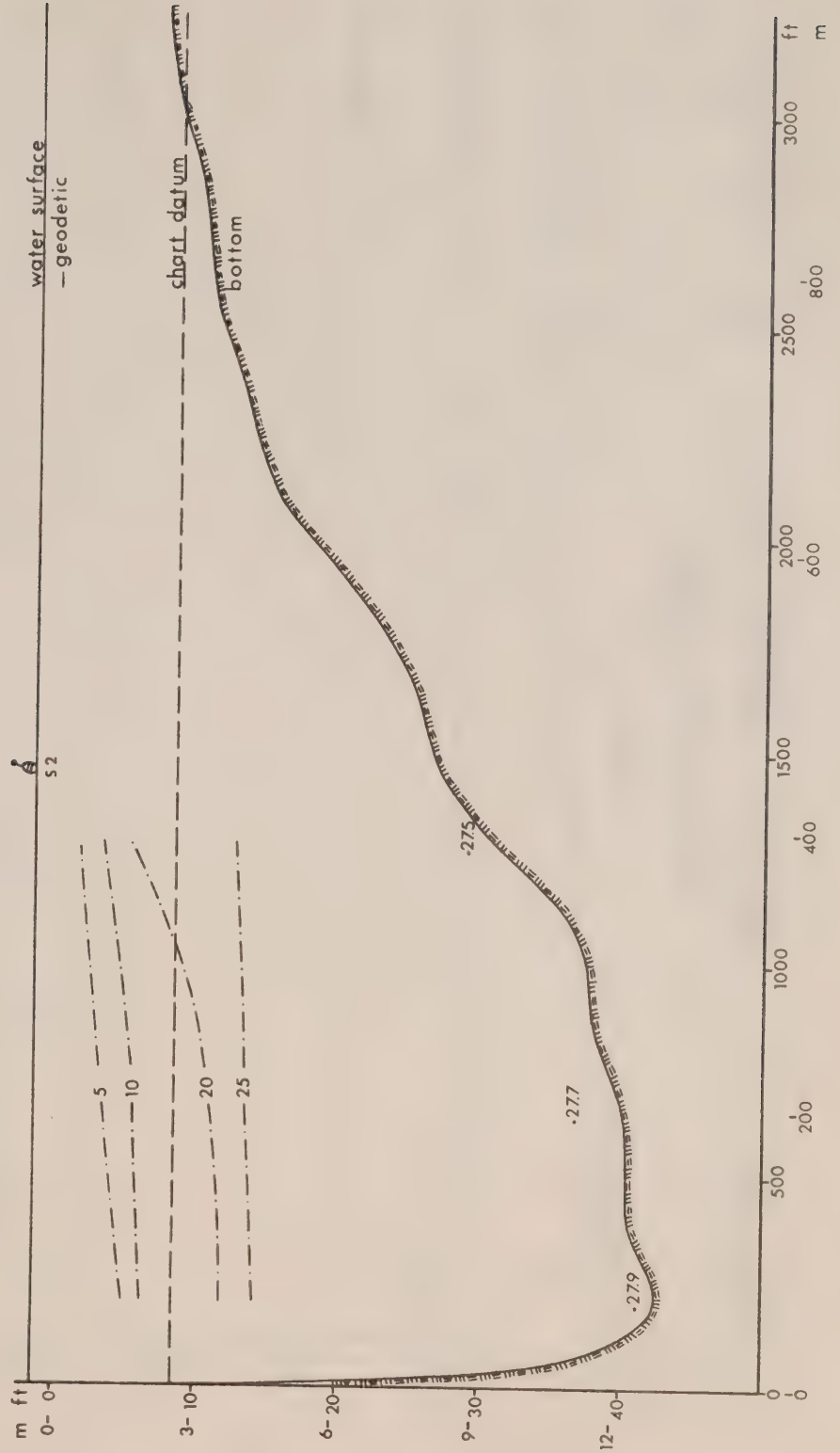
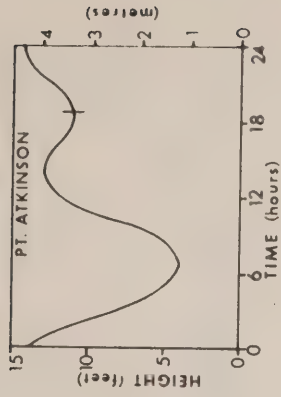




Figure 28

# SALINITY DISTRIBUTION STEVESTON AREA

$Q_{HOPE} = 220,000 \text{ cfs}$   
6,226 cms

AUGUST 4, 1976

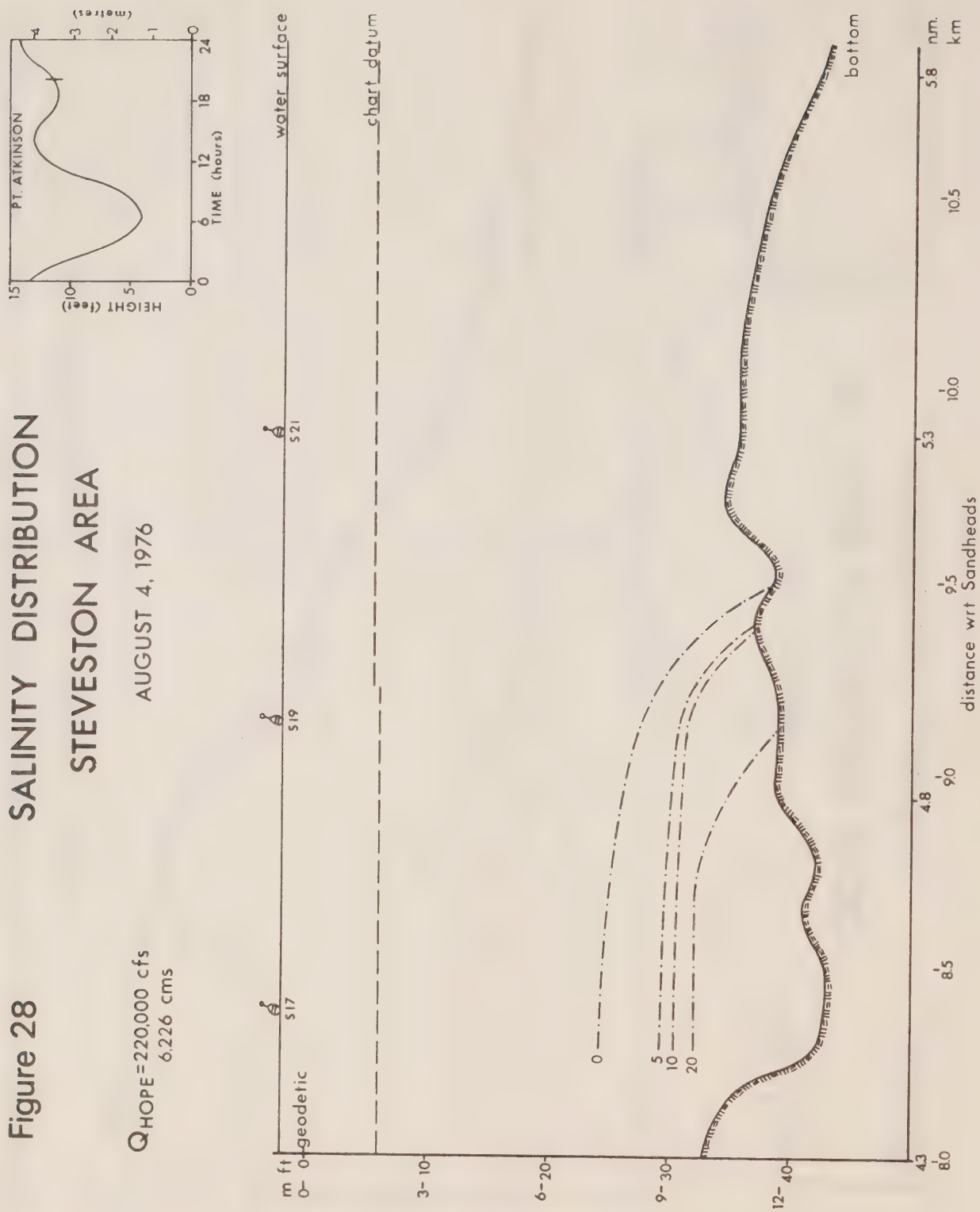


Figure 29

# SALINITY DISTRIBUTION STEVESTON AREA

$Q_{HOPE} = 220,000 \text{ cfs}$   
6,226 cms

AUGUST 4, 1976

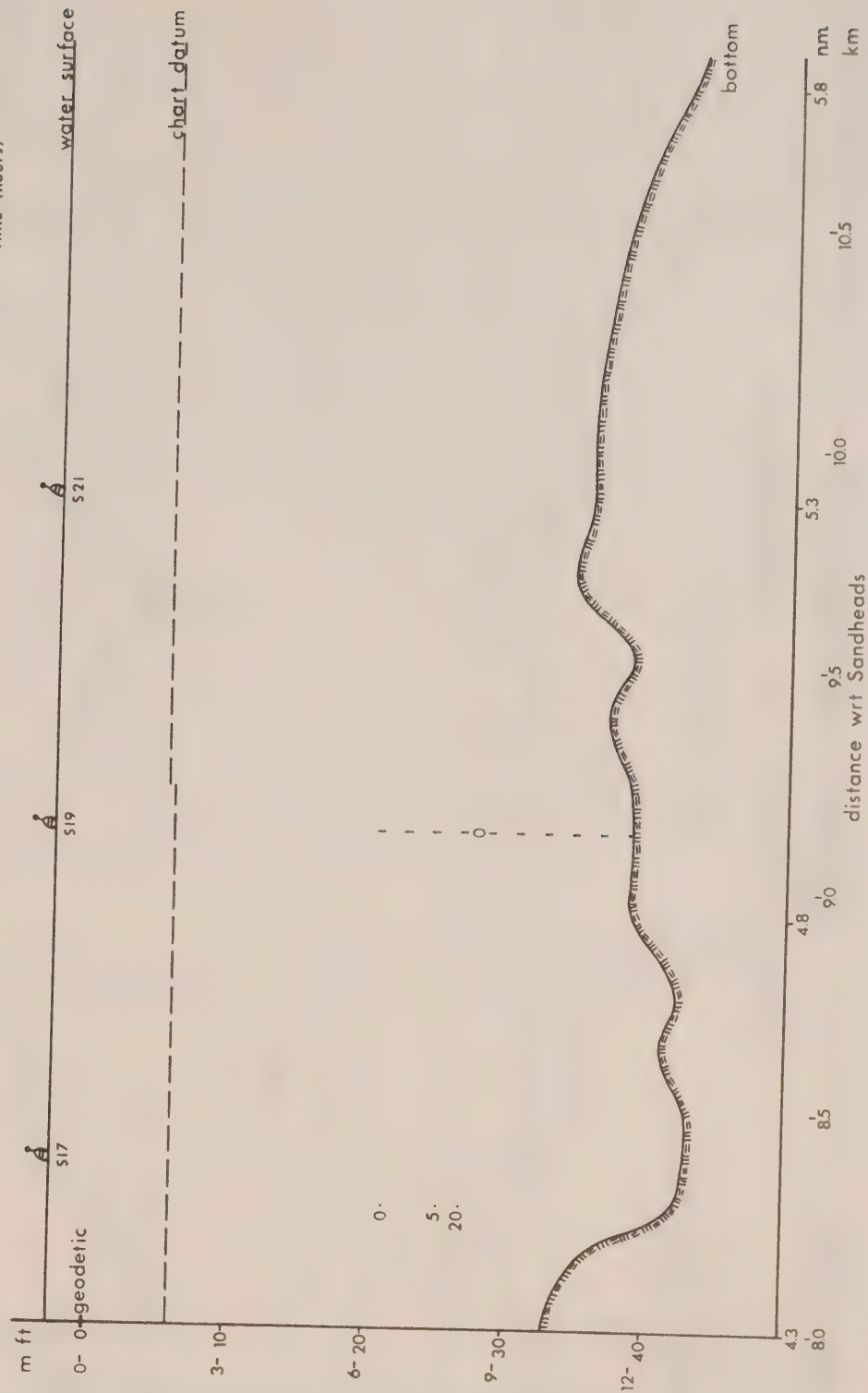
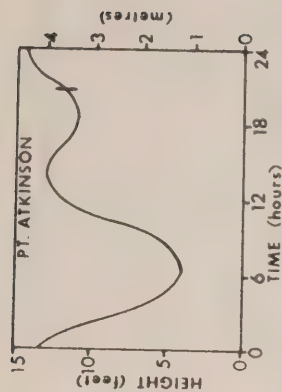


Figure 30

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 241,000 \text{ cfs}$   
 $6,280 \text{ cms}$

AUGUST 25, 1976

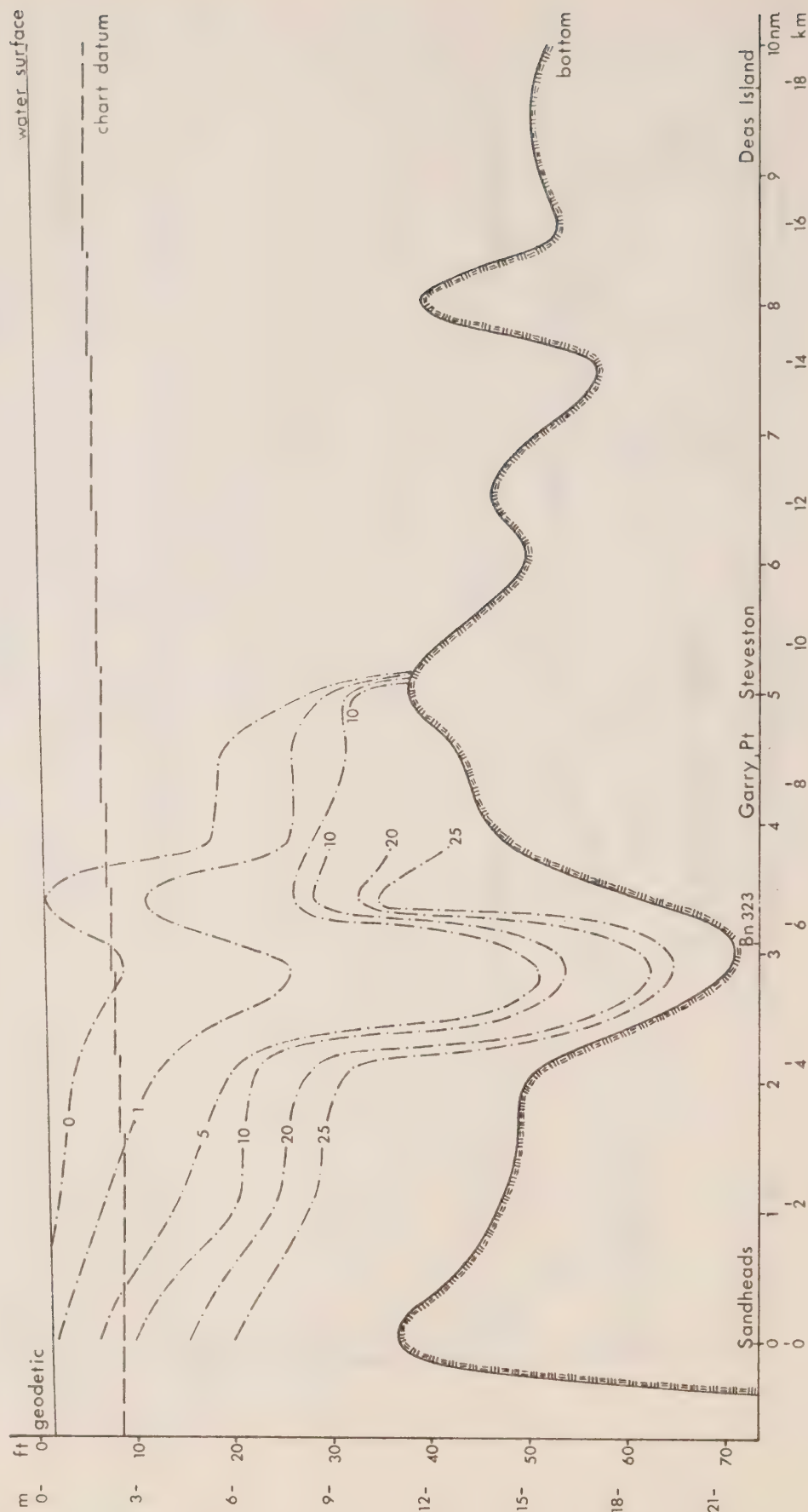
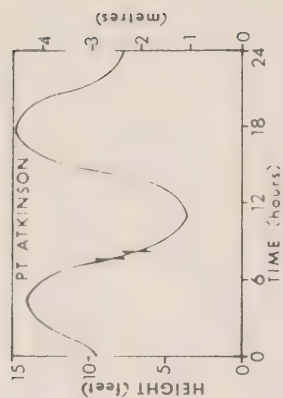


Figure 31

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 241,000 \text{ cfs}$   
 $6,820 \text{ cms}$

AUGUST 25, 1976

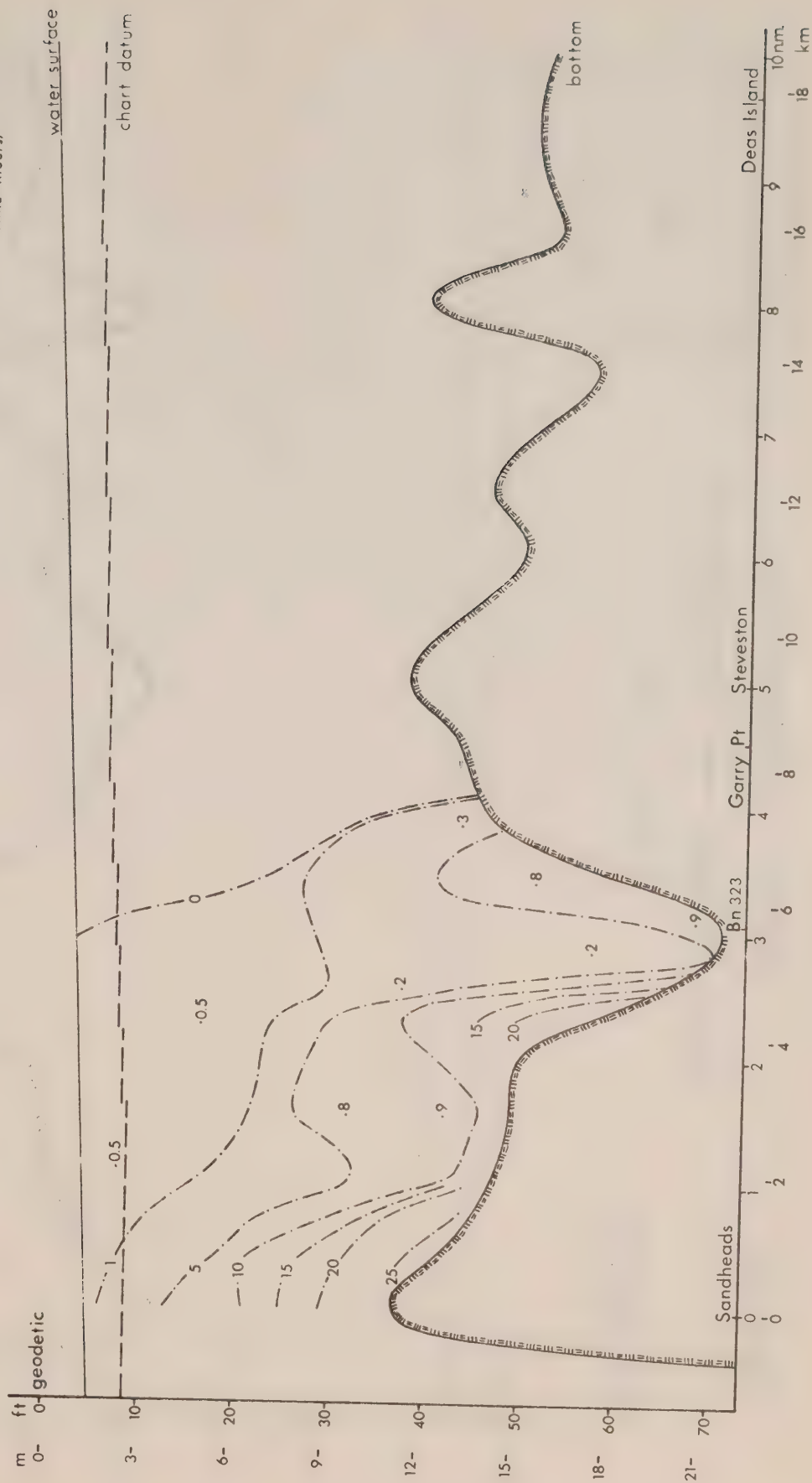
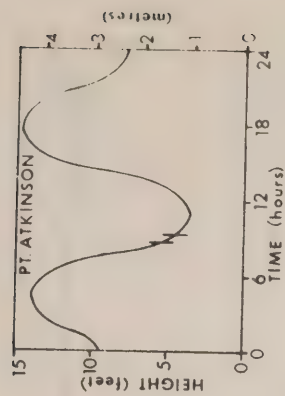




Figure 32

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 241,000 \text{ cfs}$   
 $6,820 \text{ cms}$

AUGUST 25, 1976

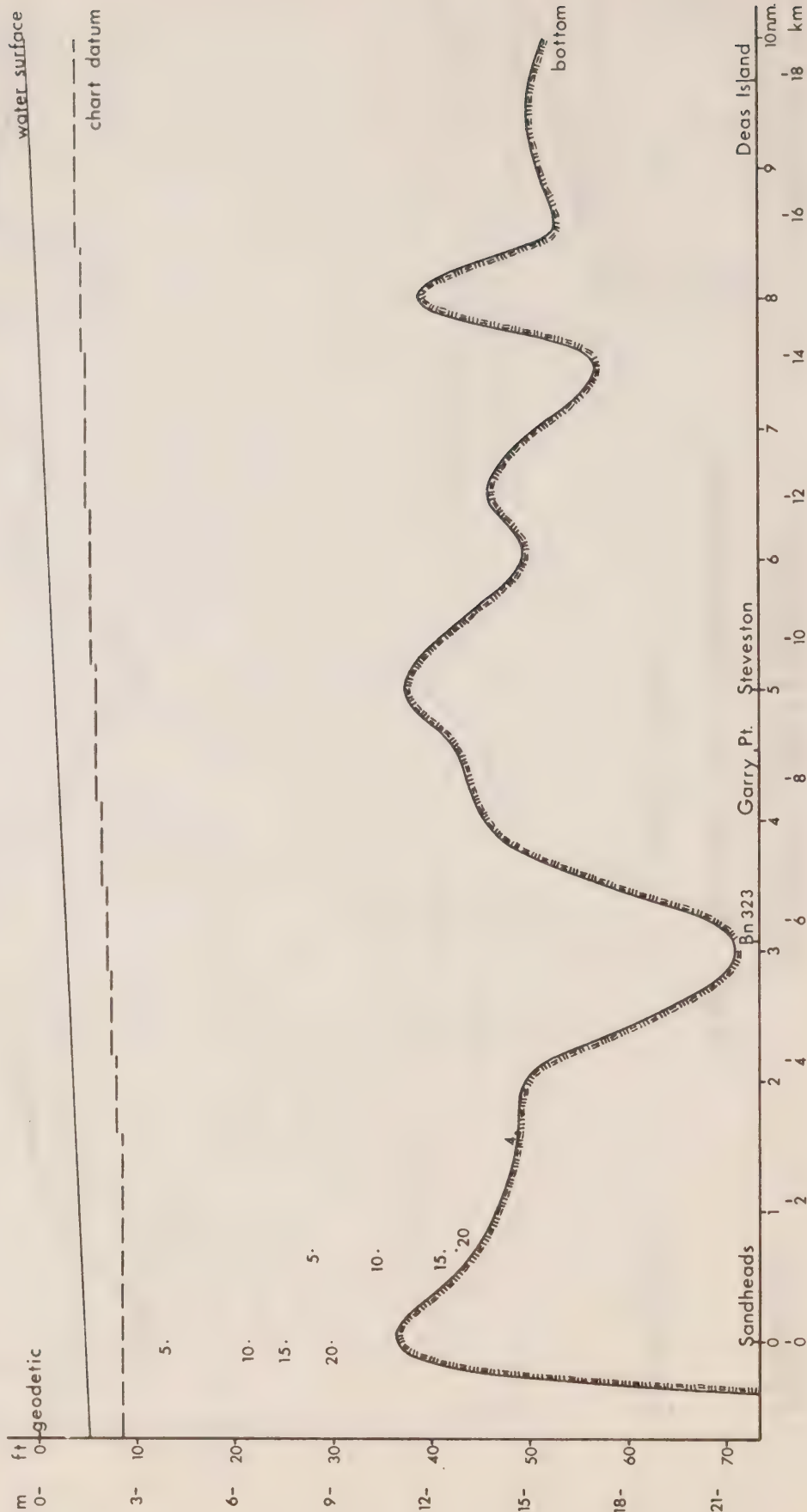
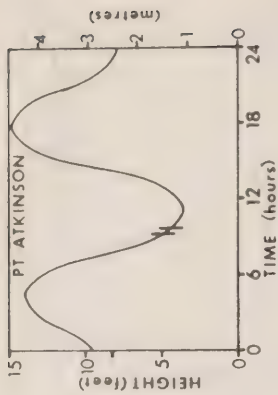


Figure 33

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 241,000 \text{ cfs}$   
 $6,820 \text{ cm}^3 \text{ s}$

AUGUST 25, 1976

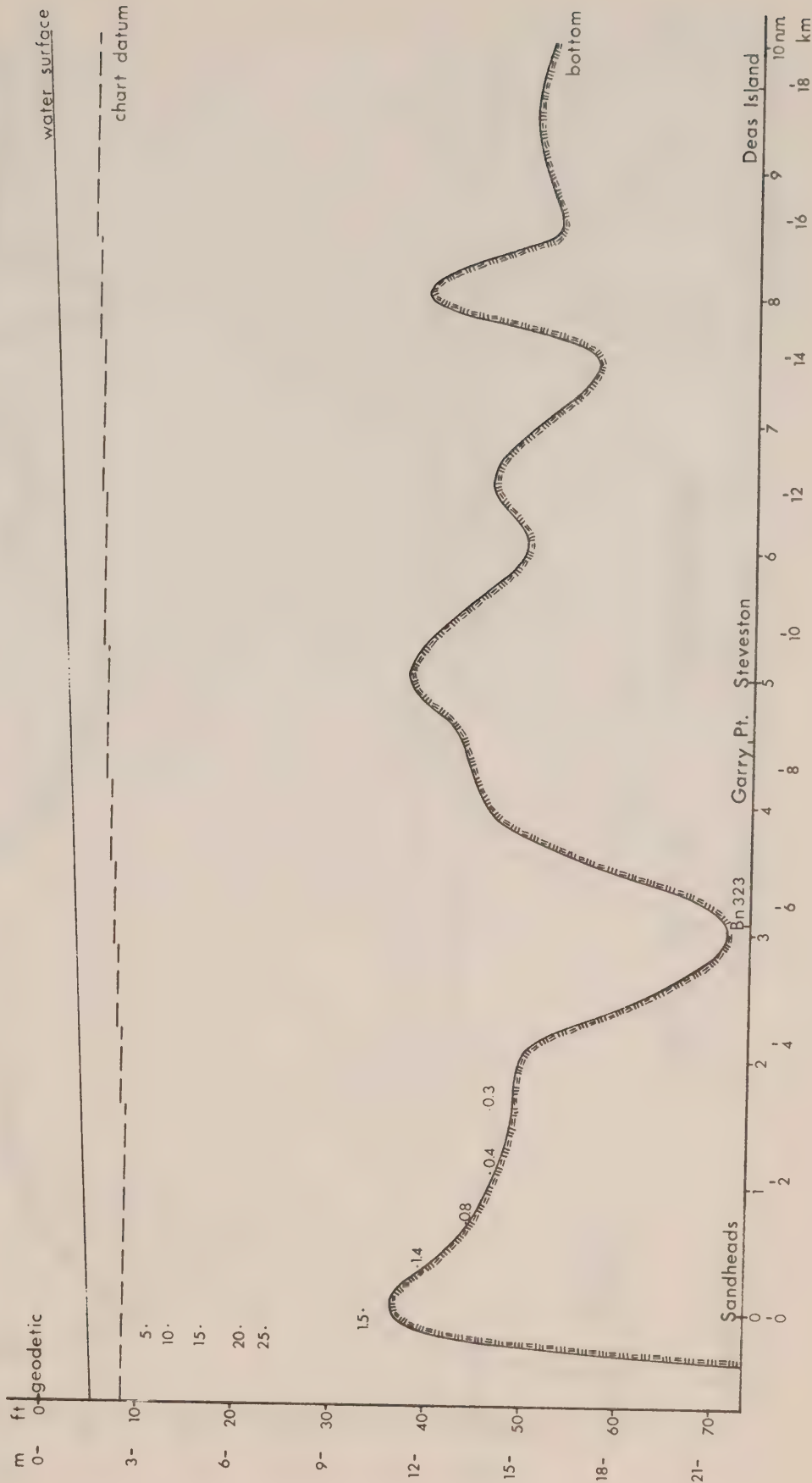
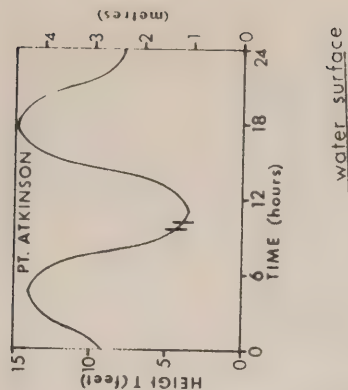


Figure 34

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 241,000 \text{ cfs}$   
 $6,820 \text{ cms}$

AUGUST 25, 1976

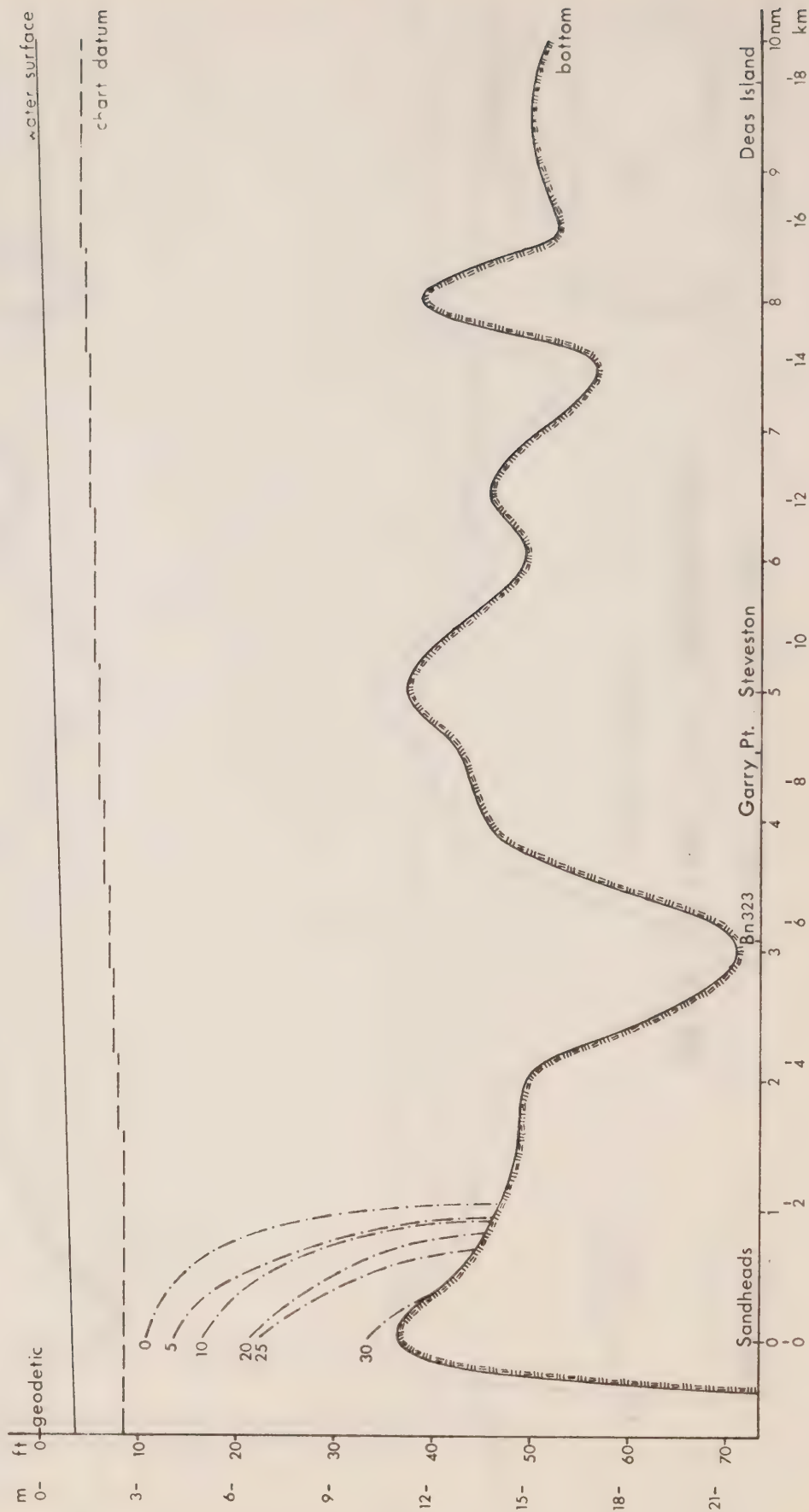
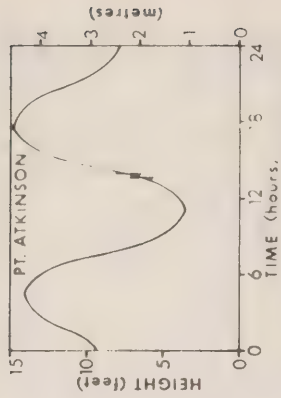
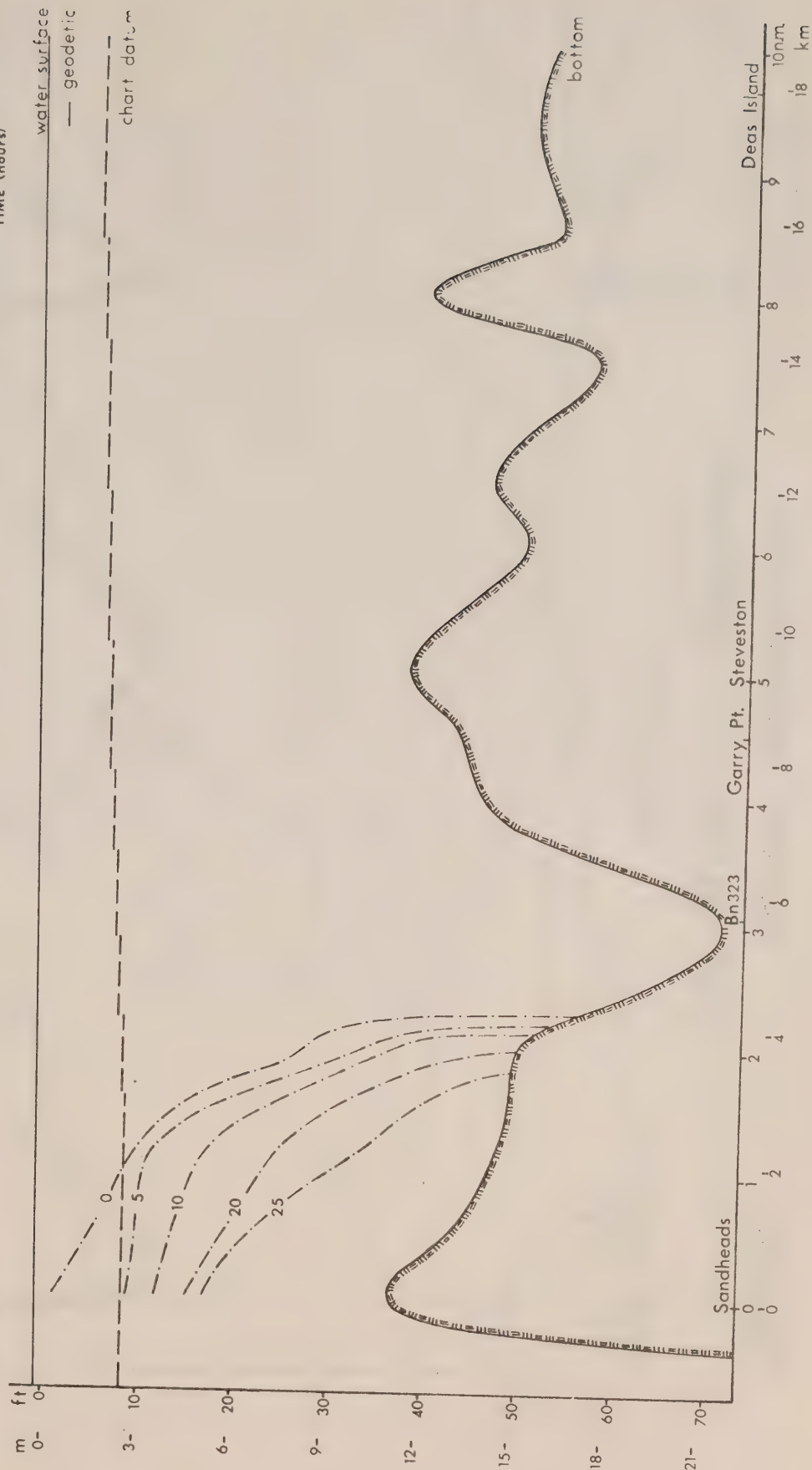
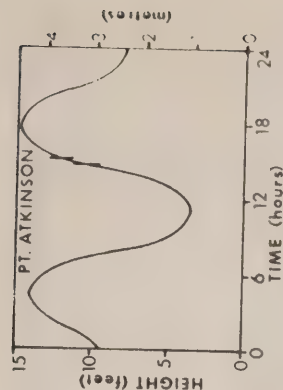


Figure 35

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 241,000 \text{ cfs}$   
 $6,820 \text{ cms}$

AUGUST 25, 1976

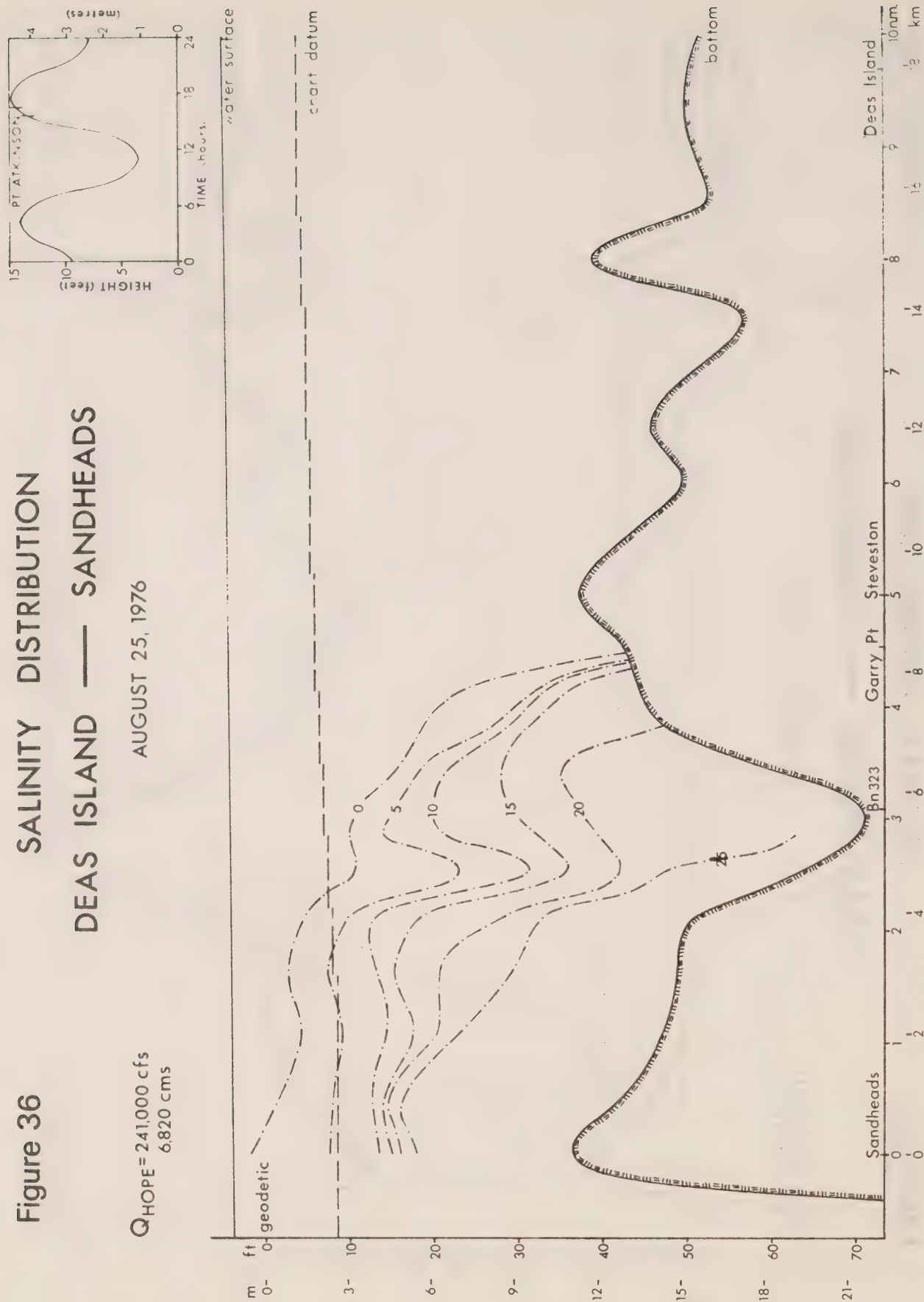




### Figure 36

$$Q_{HOPE} = 241,000 \text{ cfs}$$

AUGUST 25, 1976



# Figure 37 SALINITY DISTRIBUTION STEVESTON AREA

$Q_{HOPE} = 241,000 \text{ cfs}$   
 $6,820 \text{ cms}$

AUGUST 25, 1976

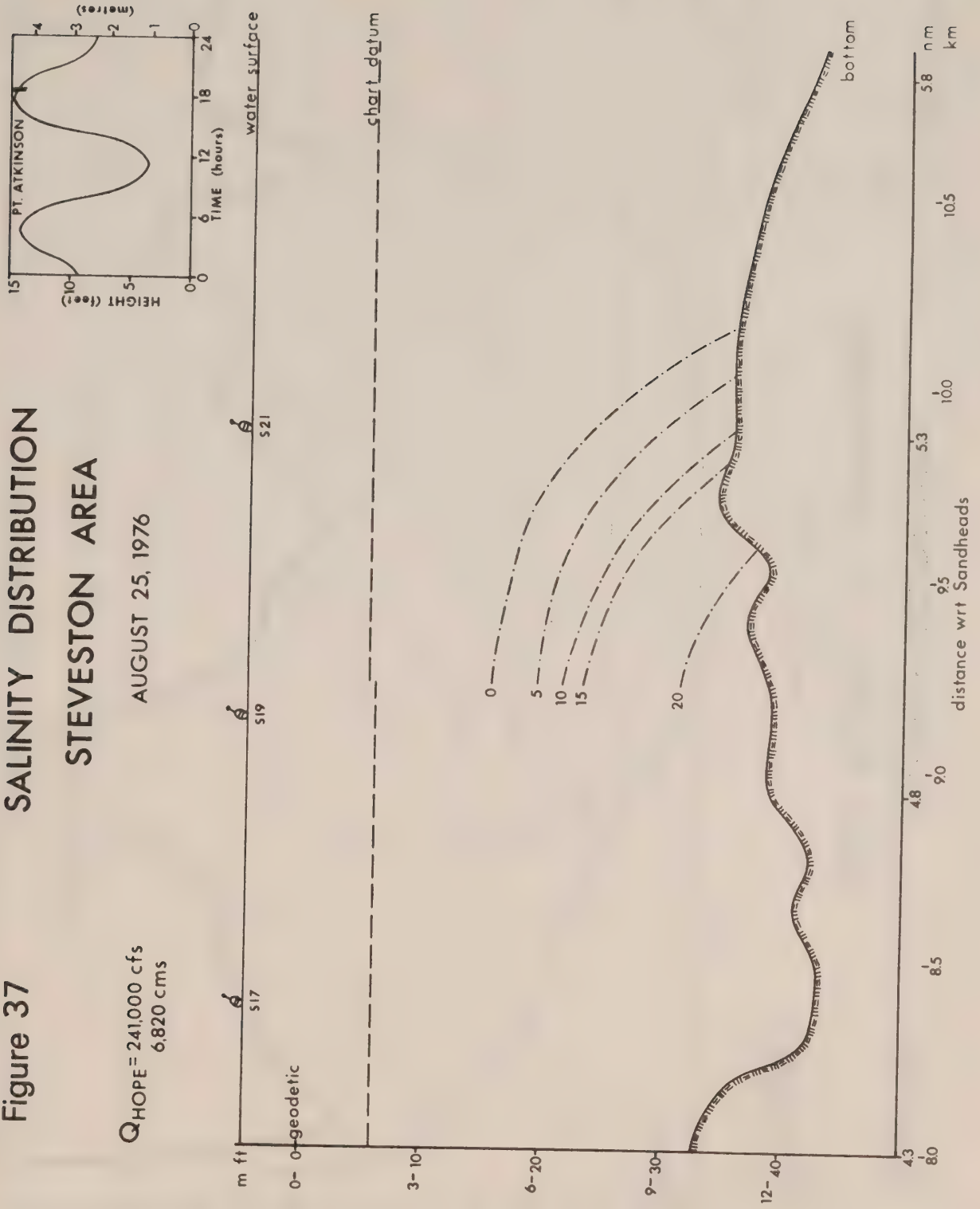
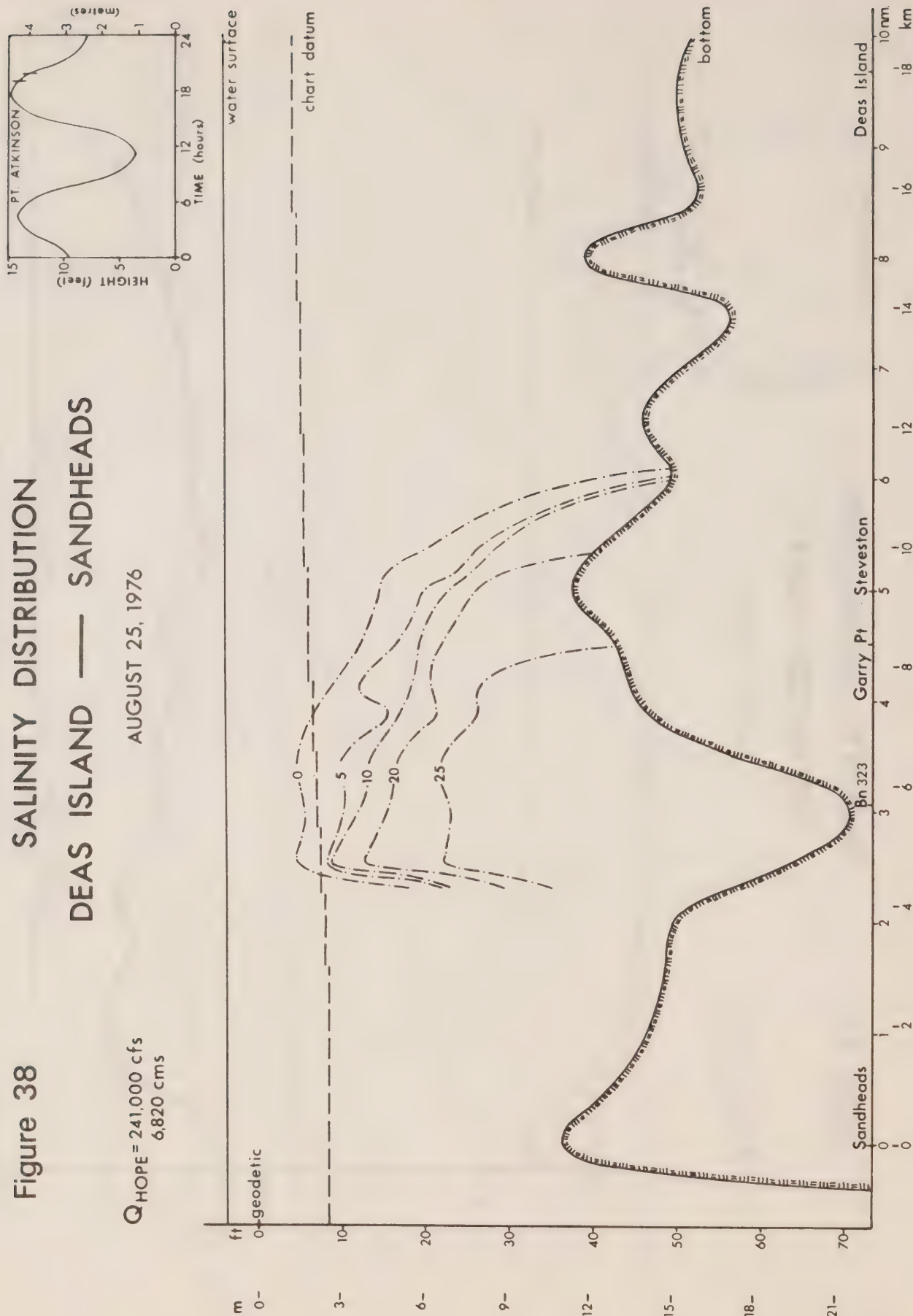


Figure 38

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 241,000 \text{ cfs}$   
 $6,820 \text{ cms}$

AUGUST 25, 1976



# Figure 39 SALINITY DISTRIBUTION CROSS SECTION AT BUOY S 21

$Q_{HOPE} = 241,000 \text{ cfs}$   
 $6,280 \text{ cms}$

AUGUST 25, 1976

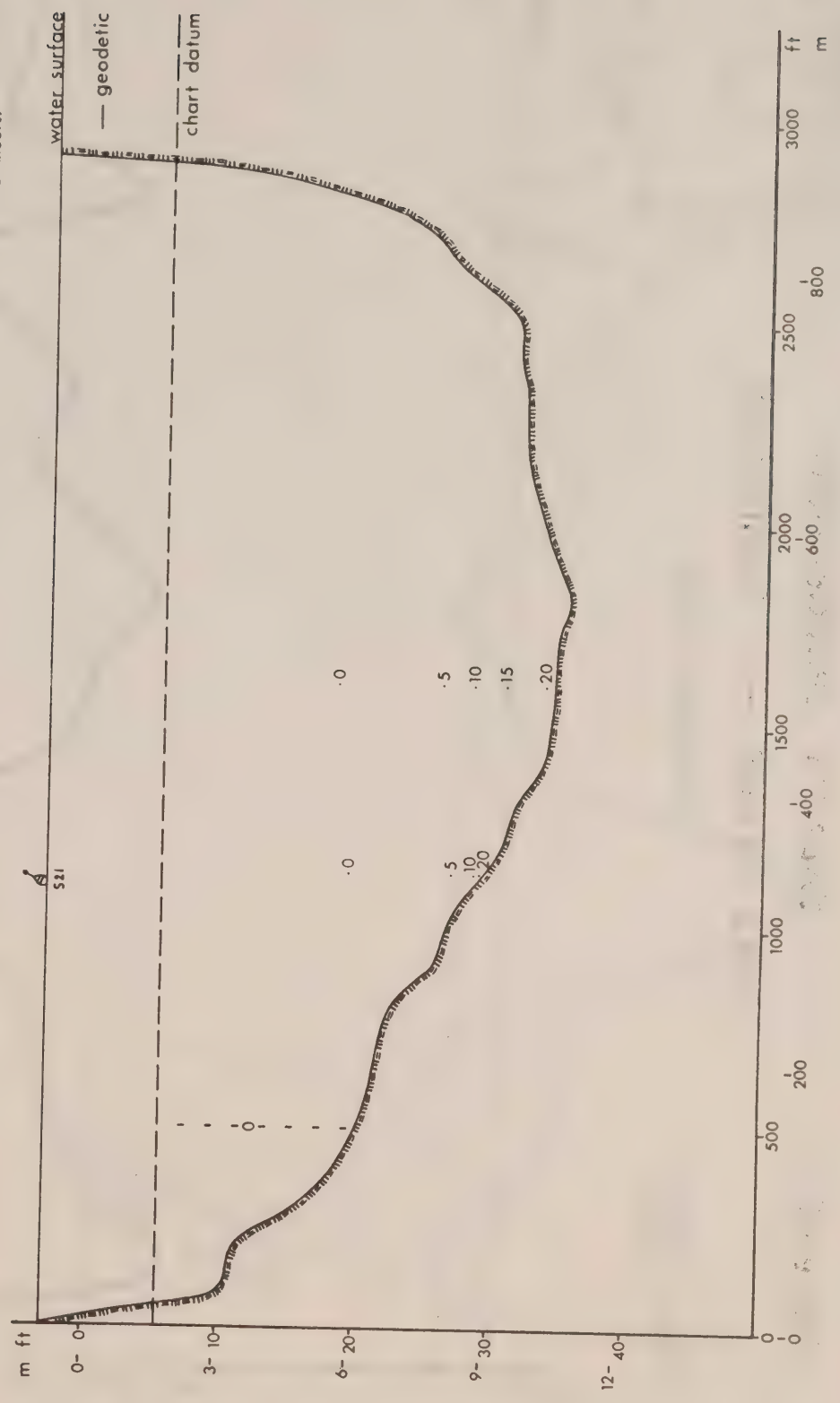
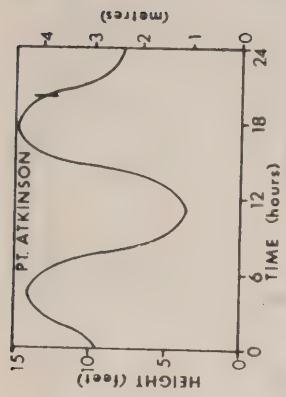




Figure 40

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 128,000 \text{ cfs}$   
 $3,622 \text{ cms}$

SEPTEMBER 23, 1976

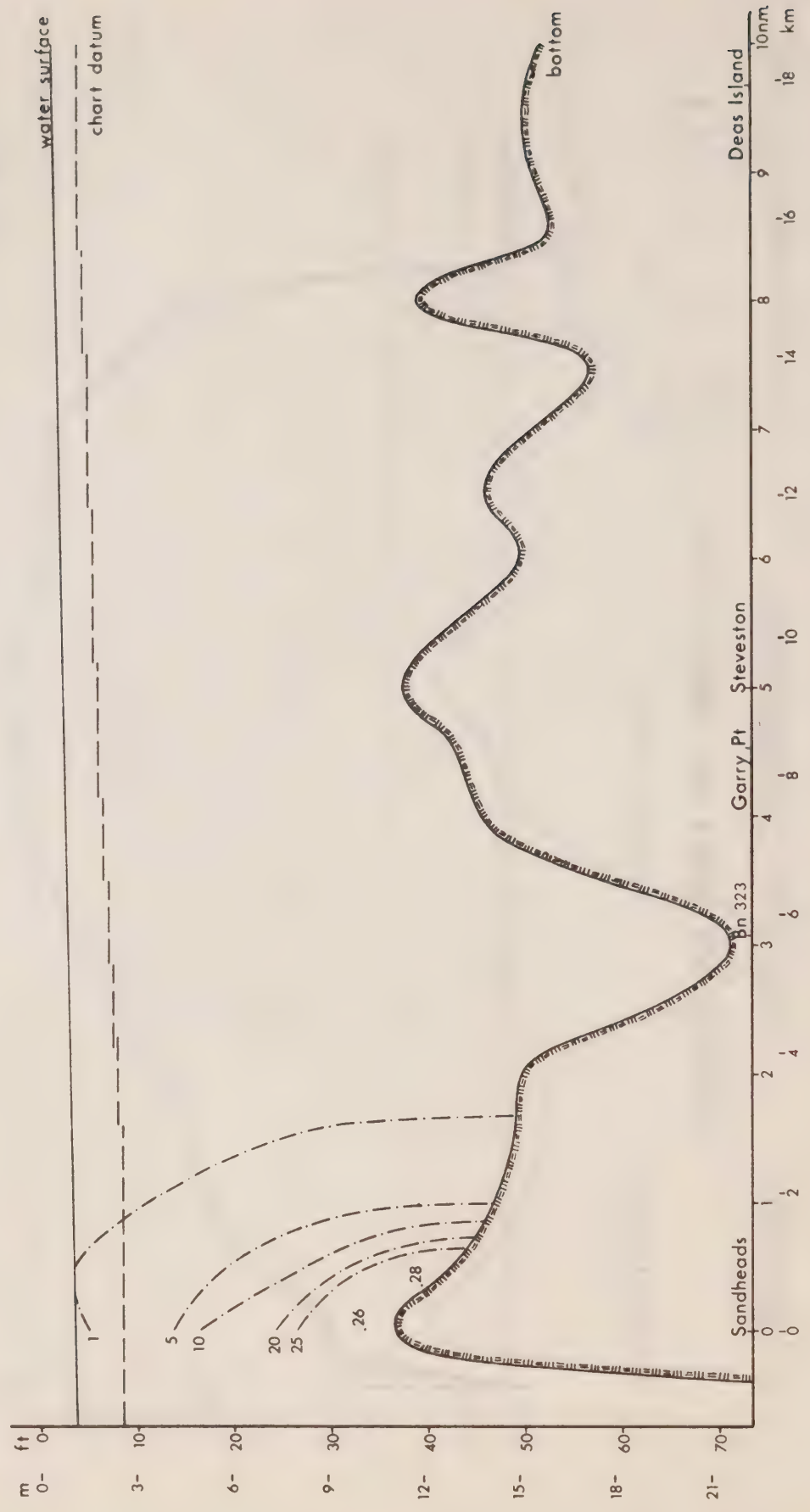
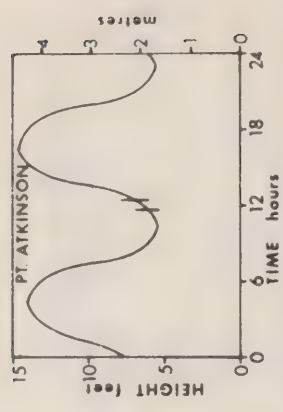


Figure 41

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 128,000 \text{ cfs}$   
 $3,622 \text{ cms}$

SEPTEMBER 23, 1976

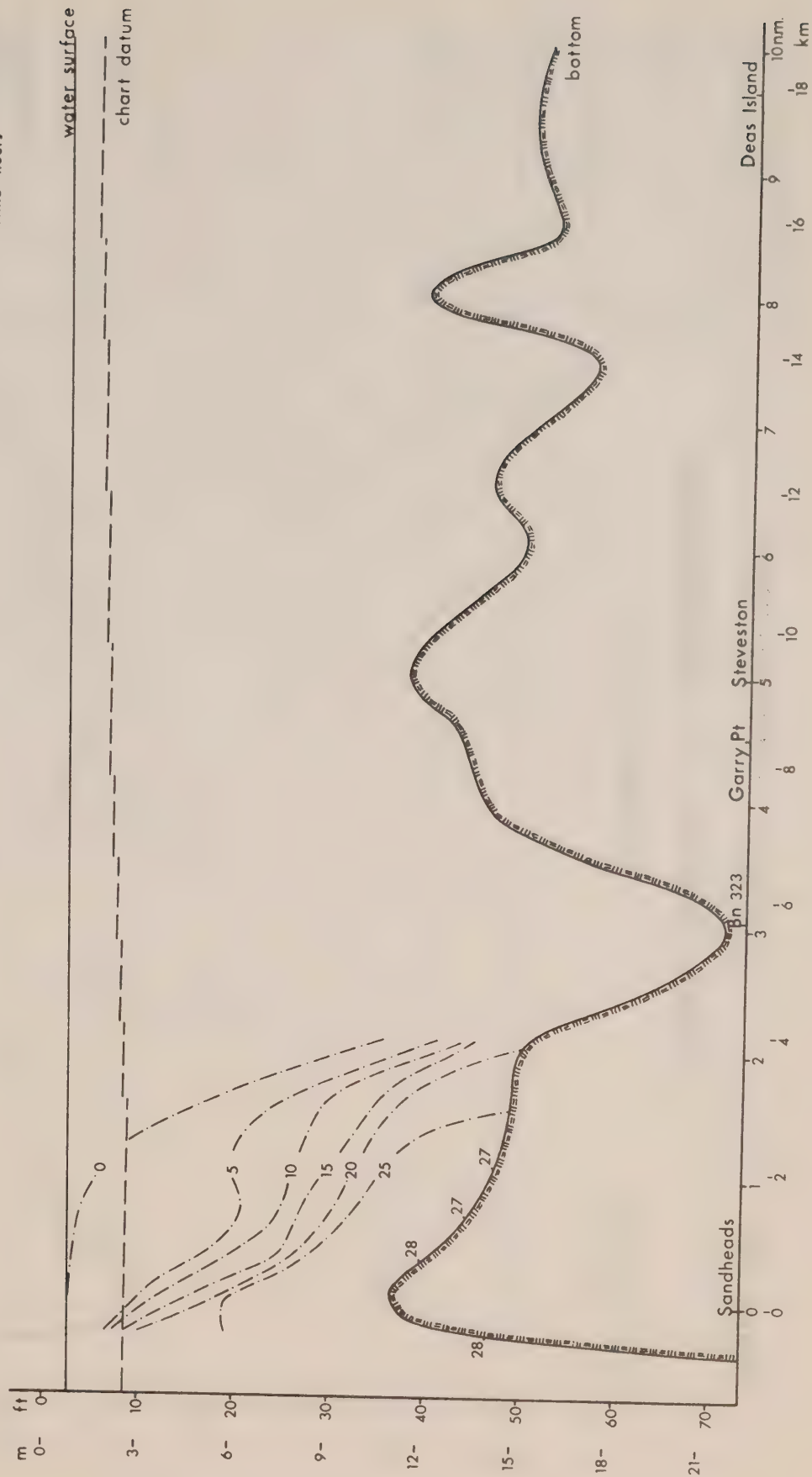
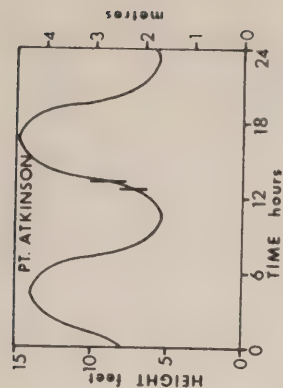
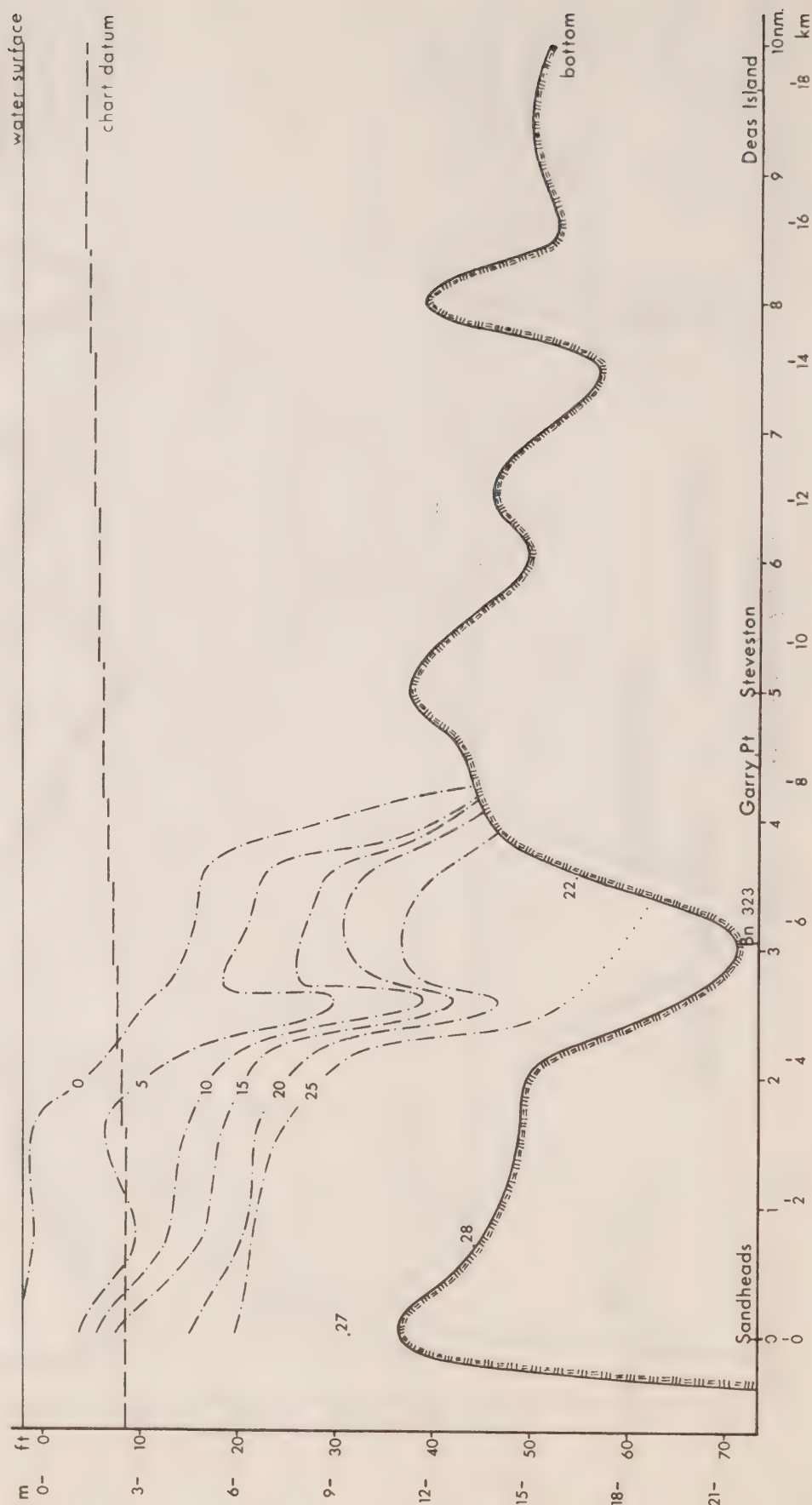
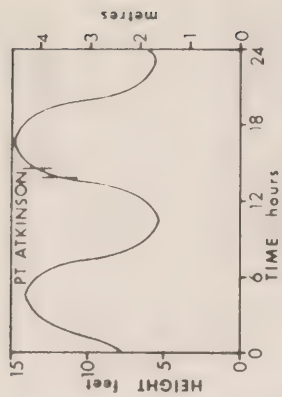


Figure 42

# SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 128,000 \text{ cfs}$   
3,622 cms

SEPTEMBER 23, 1976



# Figure 43 SALINITY DISTRIBUTION DEAS ISLAND — SANDHEADS

$Q_{HOPE} = 128,000 \text{ cfs}$   
 $3,622 \text{ cms}$

SEPTEMBER 23, 1976

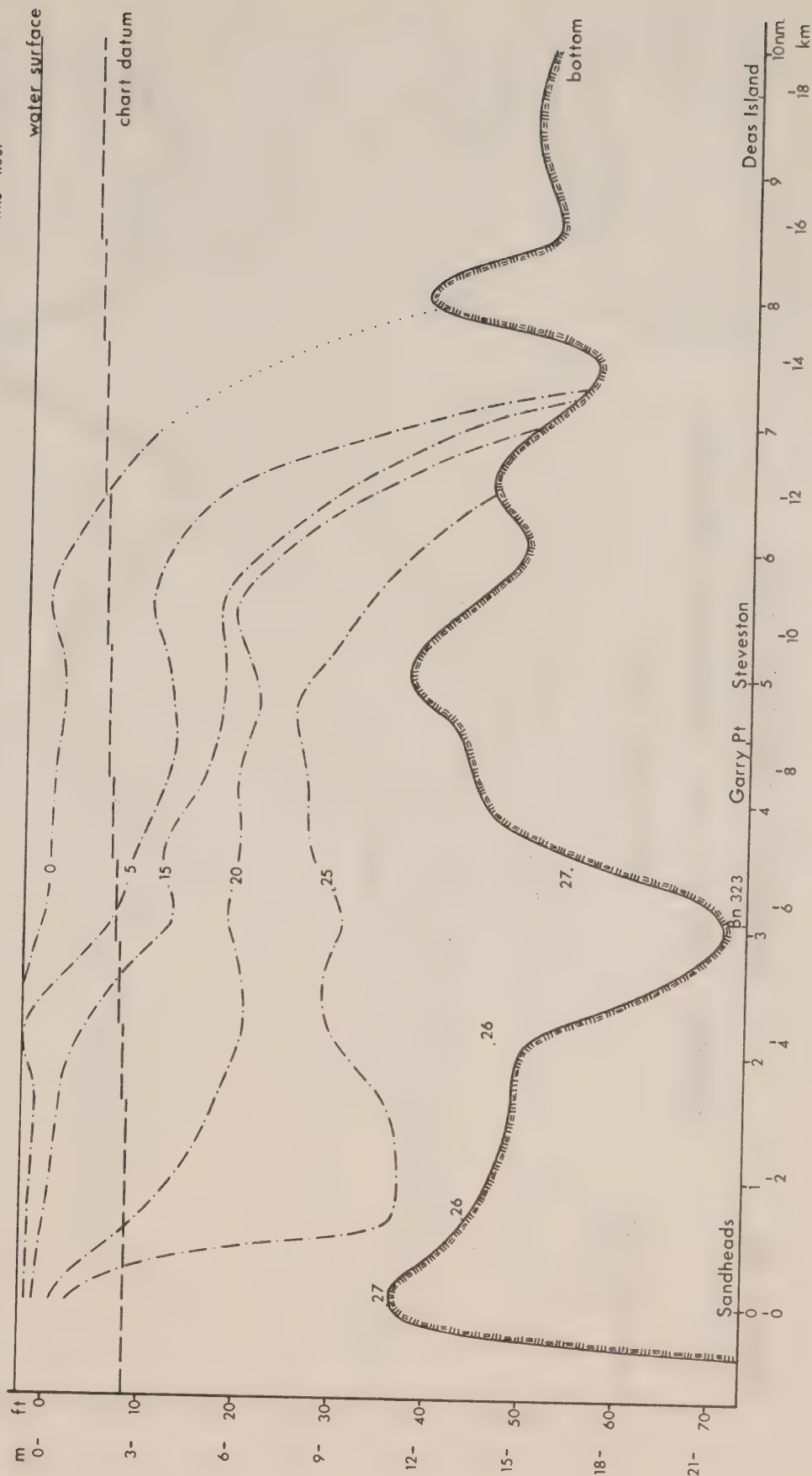
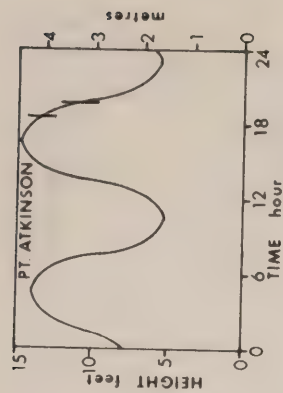




Figure 44

# SALINITY DISTRIBUTION

## GARRY POINT — ANNACIS ISLAND

DECEMBER 8, 1976

$Q_{HOPE} = 48,000 \text{ cfs}$   
1,358 cms

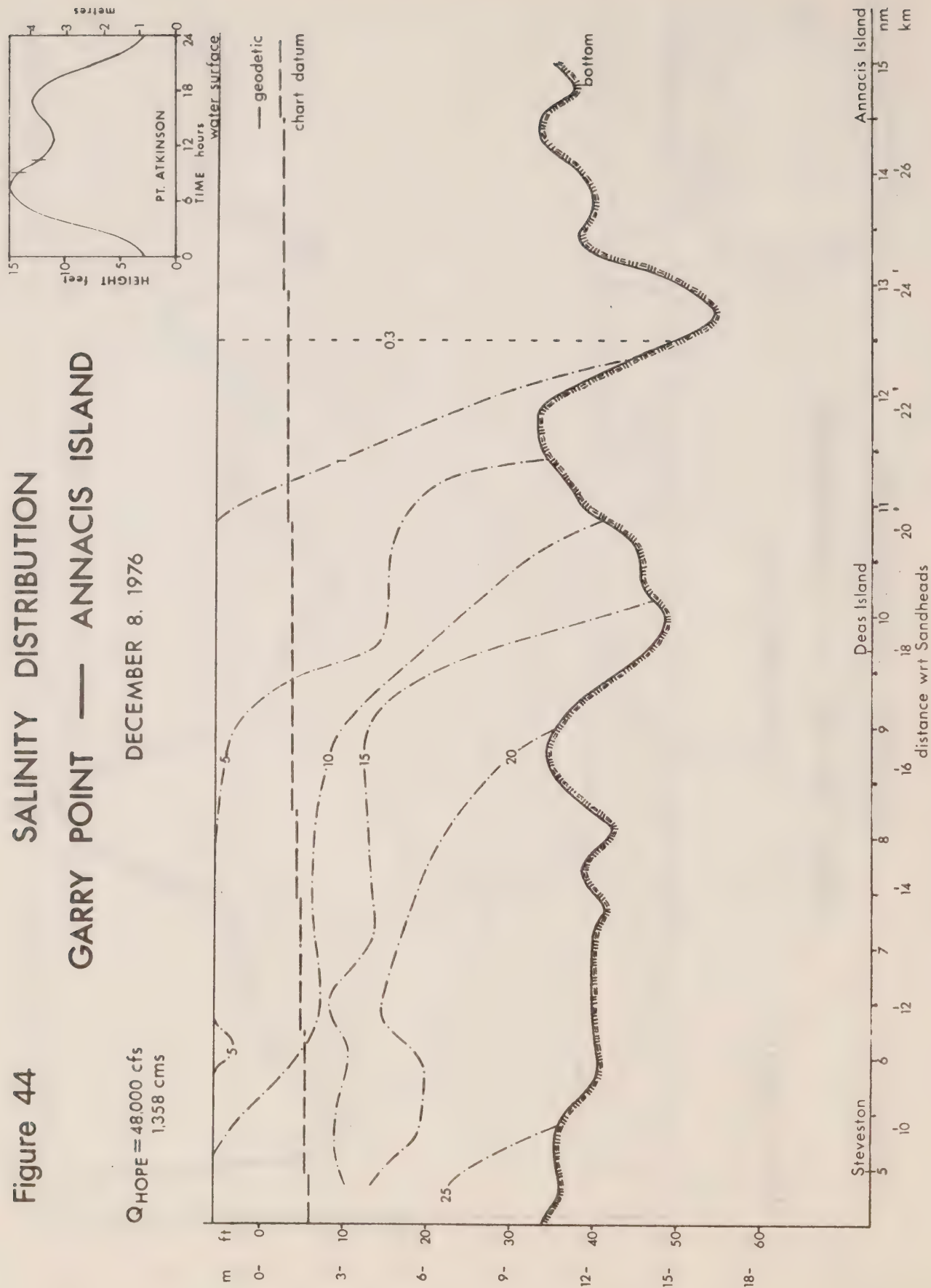


Figure 45

# SALINITY DISTRIBUTION GARRY POINT — ANNACIS ISLAND

$Q_{HOPE} = 48,000 \text{ cfs}$   
 $1,358 \text{ cms}$

DECEMBER 8, 1976

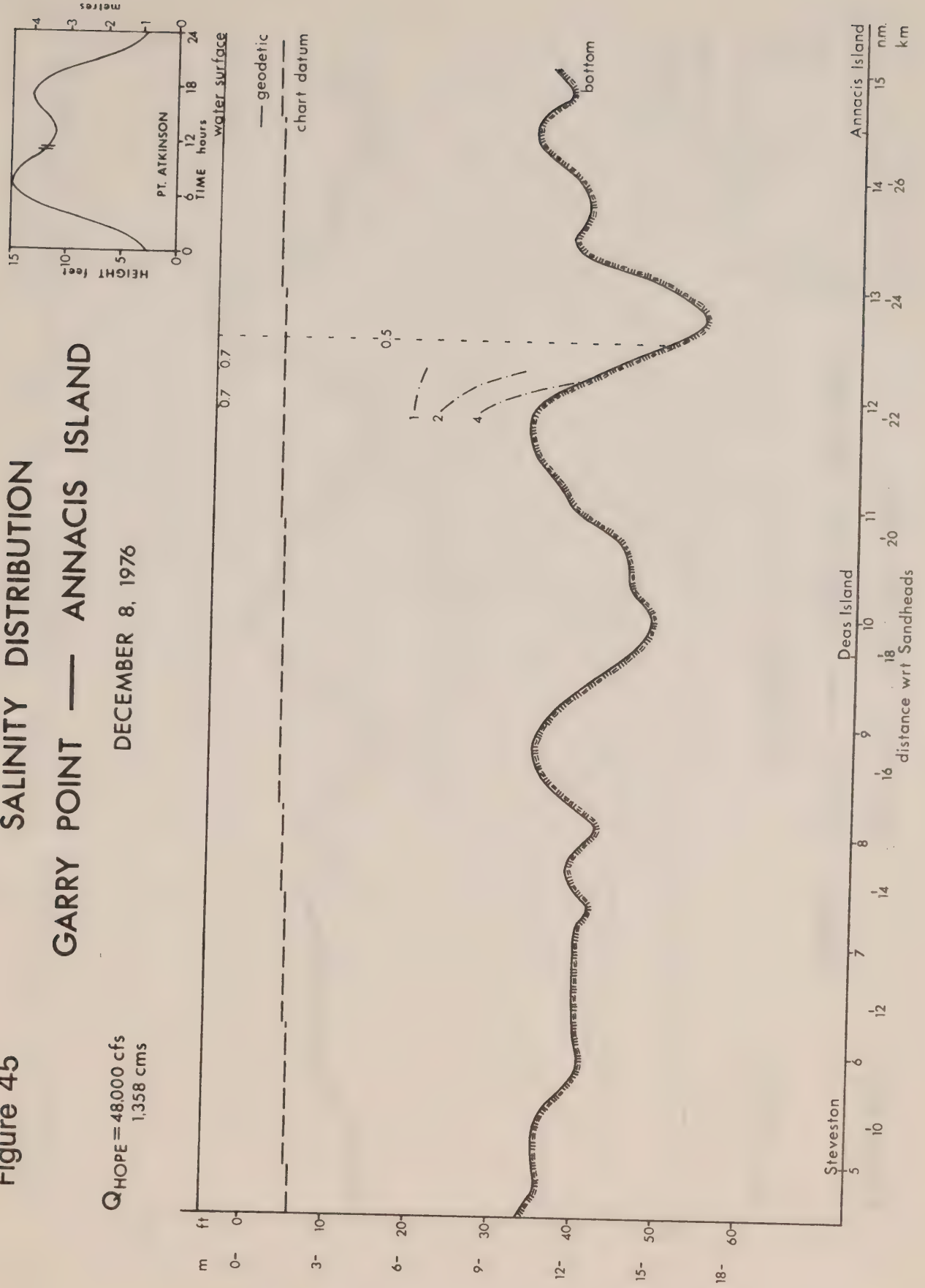


Figure 46

# SALINITY DISTRIBUTION GARRY POINT — ANNACIS ISLAND

$Q_{HOPE} = 48,000 \text{ cfs}$   
 $1,358 \text{ cms}$

DECEMBER 8, 1976

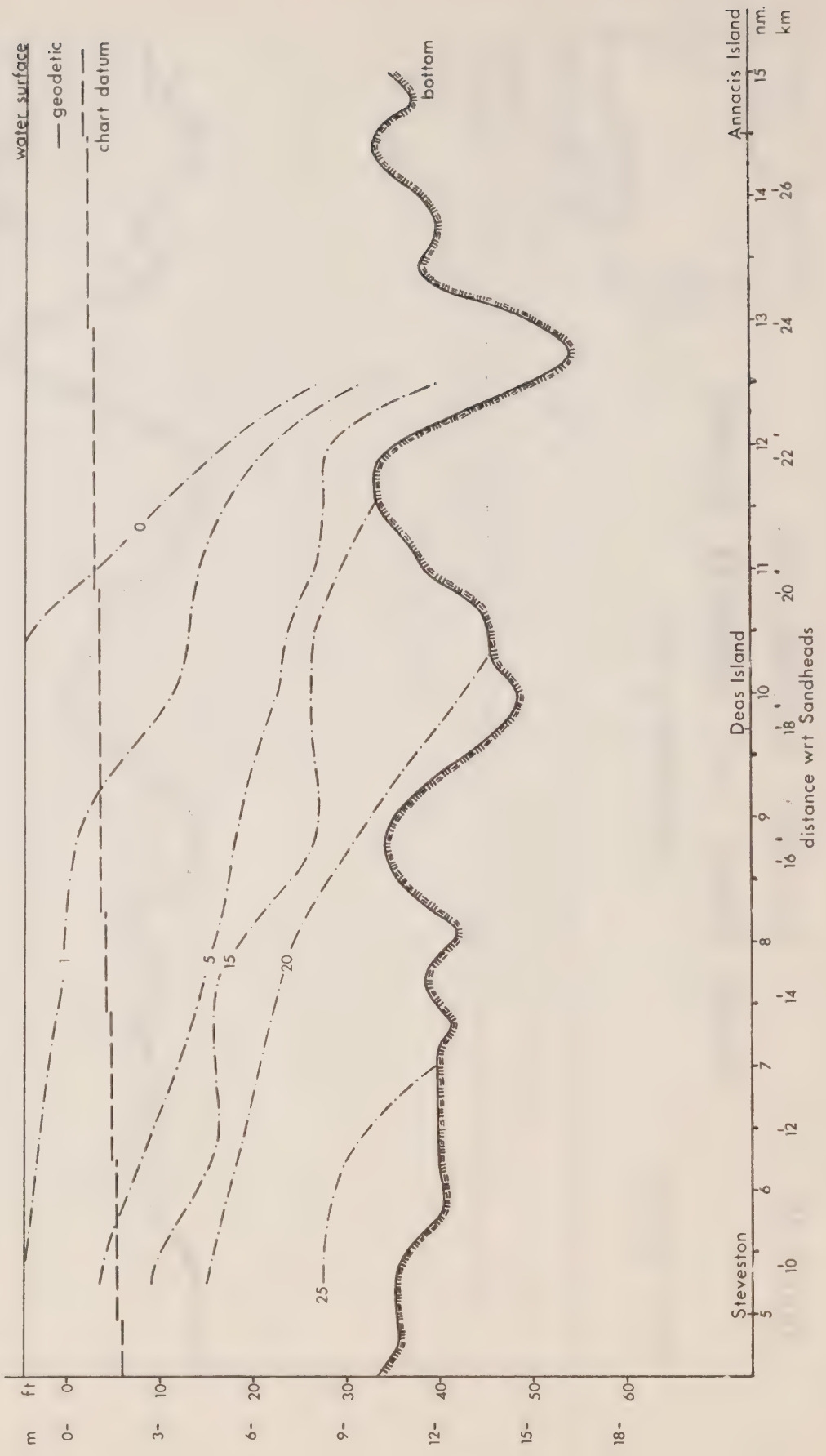
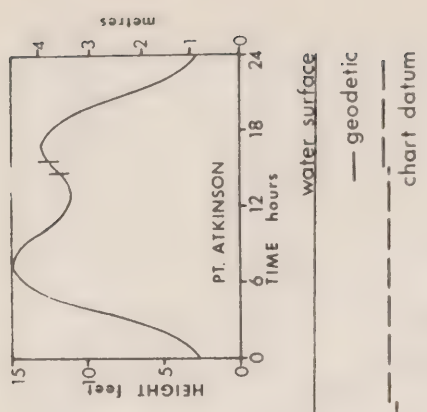


Figure 47

# SALINITY DISTRIBUTION GARRY POINT — ANNACIS ISLAND

$Q_{HOPE} = 59700 \text{ cfs}$   
1690 cms

DECEMBER 22, 1976

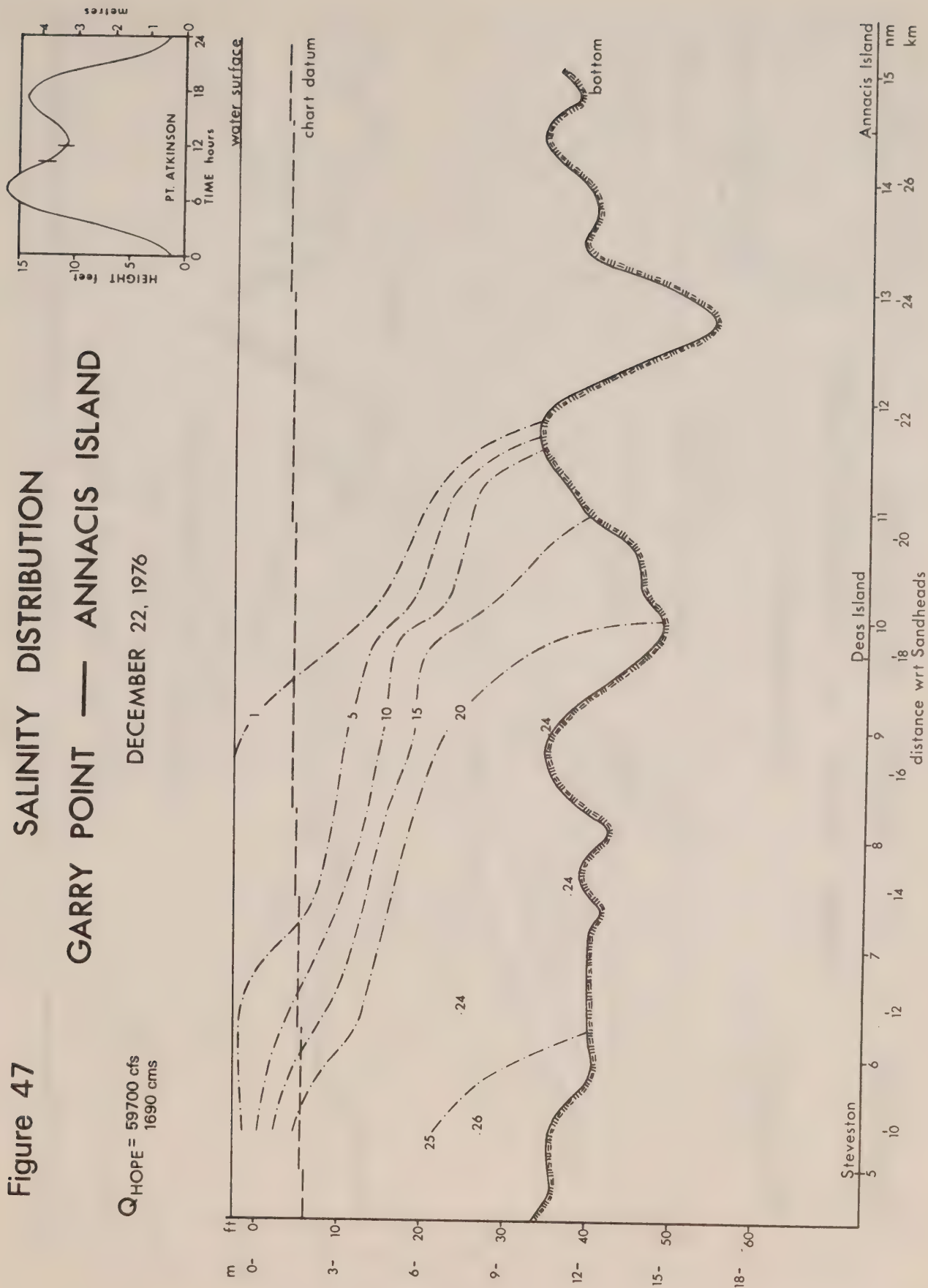




Figure 48

# SALINITY DISTRIBUTION GARRY POINT — ANNACIS ISLAND

$Q_{HOPE} = 59700 \text{ cfs}$   
1690 cms

DECEMBER 22, 1976

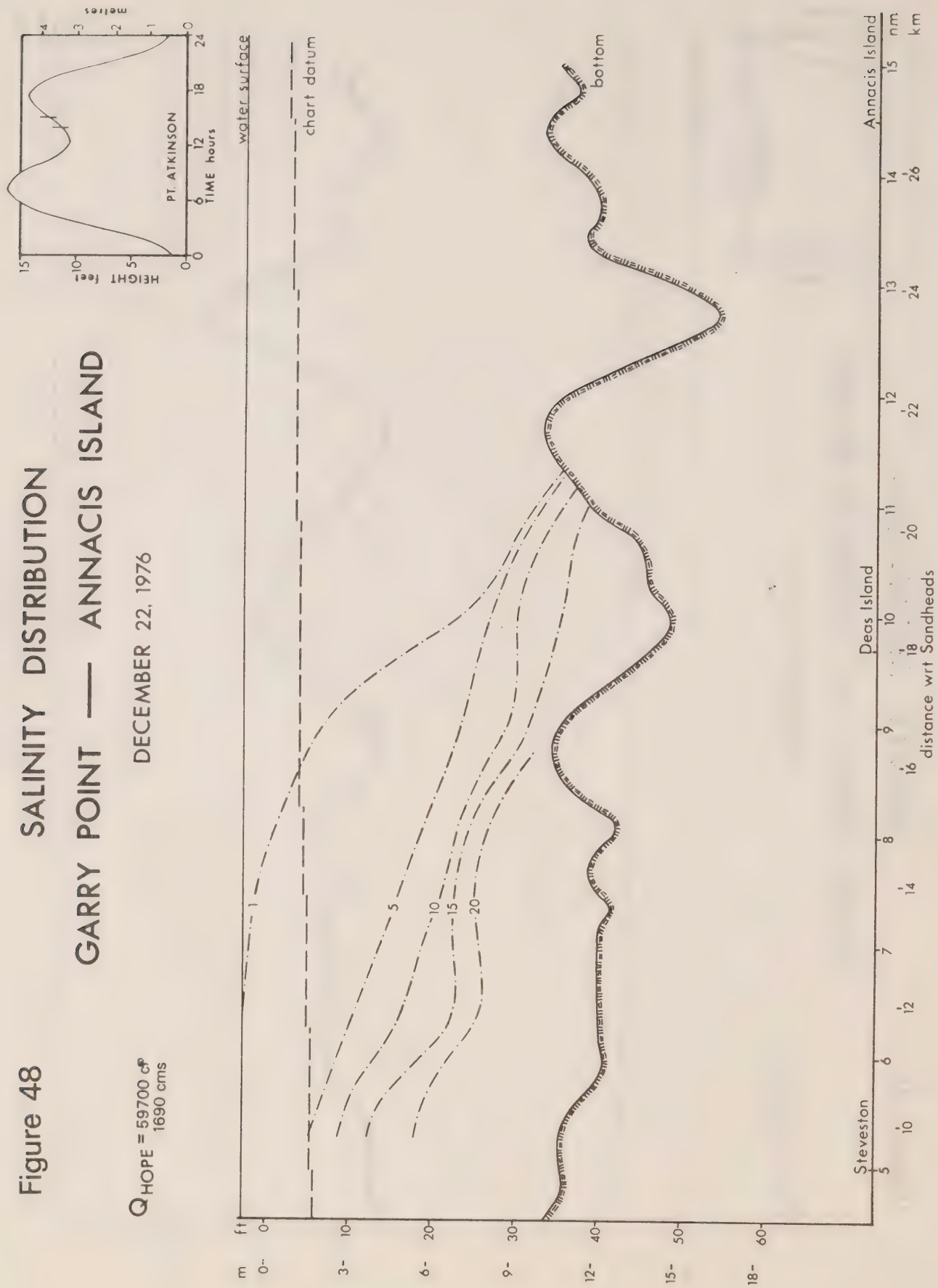
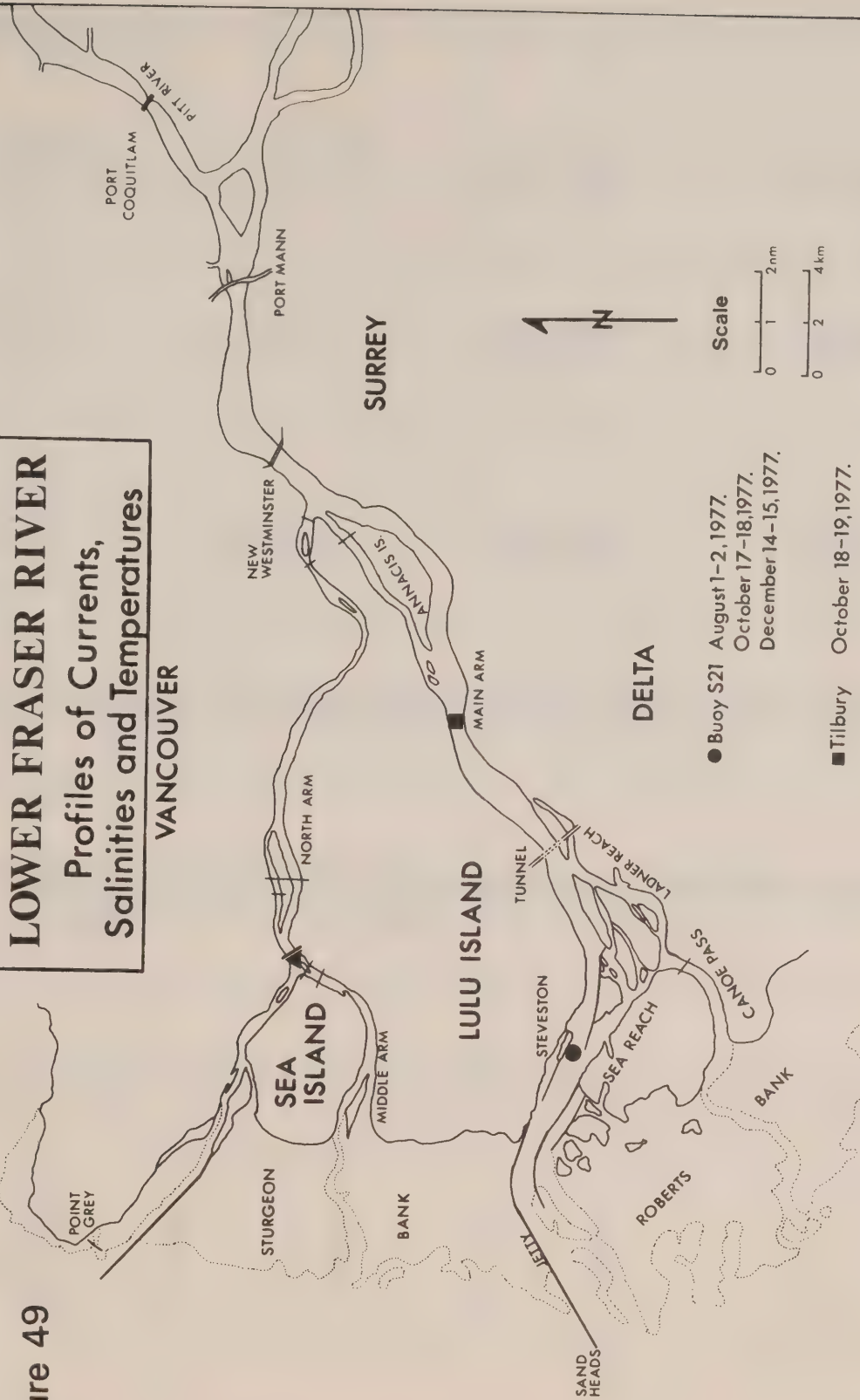


Figure 49

# **LOWER FRASER RIVER** **Profiles of Currents,** **Salinities and Temperatures**

VANCOUVER



DATE (Location)	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{\infty}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
01/08/77 (S21)	17h 30m	0	.00	7.4	.0	.34	130.
		1.0	.00	7.4	2.0	.30	110.
		2.0	.00	7.4	4.0	.31	90.
		3.0	.00	7.4	6.0	.30	110.
		4.0	.00	7.4	8.0	.16	110.
		5.0	.00	7.4			
		6.0	.00	7.4			
		7.0	.00	7.4			
	18h 30m	8.0	.00	7.4			
		8.5	.00	7.4			
		0	.00	7.4	.0	.30	200.
		1.0	.00	7.4	2.0	.31	120.
		2.0	.00	7.4	4.0	.22	110.
		3.0	.00	7.4	6.0	.22	100.
		4.0	.00	7.4	8.0	.61	110.
	19h 00m	5.0	.00	7.4			
		6.0	.00	7.3			
		7.0	12.20	6.7			
		8.0	18.80	6.0			
		0	.00	7.4	.0	.13	130.
		1.0	.00	7.4	2.0	.13	150.
		2.0	.00	7.4	4.0	.11	140.
		3.0	.00	7.4	6.0	.34	100.
	19h 30m	4.0	.50	7.3	8.0	.76	100.
		5.0	4.80	7.1			
		6.0	12.60	7.0			
		7.0	20.20	6.1			
		8.0	23.20	5.8			
		9.0	23.20	5.8			
		0	.00	7.4	.0	.07	110.
		1.0	.00	7.4	2.0	.03	150.
		2.0	.00	7.4	4.0	.03	140.
		3.0	.00	7.4	6.0	.31	130.
		4.0	.20	7.3	8.0	.43	110.
		5.0	3.50	7.2			

DATE (Location)	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
01/08/77 (S21)	19h 30m	6.0	9.40	7.0			
		7.0	24.10	6.1			
		8.0	25.20	5.6			
		9.0	26.70	5.5			
	20h 00m	.0	.00	7.4	.0	.03	230
		1.0	.00	7.4	2.0	.12	260.
		2.0	.00	7.4	4.0	.11	250.
		3.0	.00	7.4	6.0	.39	110.
		4.0	.70	7.3	8.0	.16	90.
		5.0	4.50	7.2			
		6.0	19.20	7.2			
		7.0	20.80	6.1			
	20h 30m	8.0	28.30	5.3			
		9.0	28.00	5.3			
		.0	.00	7.3	.0	.43	290.
		1.0	.00	7.3	2.0	.32	280.
		2.0	.00	7.3	4.0	.22	160.
		3.0	1.50	7.3	6.0	.30	120.
		4.0	6.70	7.2	8.0	.09	180.
		5.0	13.00	7.3			
		6.0	21.40	7.0			
		6.3	21.70	7.0			
		7.0	22.10	5.8			
	21h 30m	8.0	27.90	5.2			
		9.0	29.30	5.2			
		.0	.00	7.4	.0	.92	300.
		1.0	.00	7.4	2.0	.86	290.
		2.0	.00	7.4	4.0	.43	290.
		3.0	1.50	7.4	6.0	.15	290.
		4.0	8.60	7.3	8.0	.00	
		5.0	13.10	7.3			
		6.0	23.70	5.9			
		7.0	26.20	5.4			
		8.0	28.20	5.2			
		8.7	29.60	5.2			



DATE	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
01/08/77	22h 00m	.0	.00	7.4	.0	1.64	300.
		1.0	.00	7.4	4.0	1.29	290.
		2.0	.00	7.4	6.0	.43	290.
		3.0	1.50	7.3	8.0	.00	
		4.0	7.70	7.1			
		5.0	15.30	7.1			
		6.0	24.00	5.8			
		7.0	27.20	5.5			
	22h 30m	8.0	28.80	5.3			
		8.7	29.30	5.3			
		.0	.00	7.4	.0	1.78	270.
		1.0	.00	7.4	4.0	1.64	280.
		2.0	.70	7.4	8.0	1.36	310.
		3.0	2.00	7.3			
02/08/77	00h 30m	4.0	5.40	7.1			
		5.0	17.00	6.8			
		6.0	24.40	6.2			
		7.0	29.20	5.6			
		8.0	29.40	5.3			
		8.4	29.40	5.2			
	01h 30m	.9	.30	10.9	.0	2.16	290.
		1.7	1.35	10.9	4.0	1.36	310.
		2.4	2.40	10.8	8.0	.68	310.
		4.2	6.10	10.4	9.0	.30	340.
	02h 30m	1.0	.90	10.9	.0	.86	290.
		7.3	7.85	10.0	2.0	.80	310.
					6.0	.61	320.
					8.0	.30	320.
		1.0	.00	10.9	.0	.68	310.
		4.0	.00	10.9	2.0	.86	310.
		7.0	.00	10.9	4.0	.68	290.
					6.0	.63	290.
					8.0	.63	320.

DATE (Location)	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/sec)	DIRECTION (True)
17/10/77 (S21)	11h 00m	.0	3.00	9.9	.0	.00	
		1.0	3.60	9.9	1.0	.00	
		2.0	4.00	9.8	2.0	.12	110.
		3.0	7.00	9.9	3.0	.25	110.
		4.0	12.50	9.9	4.0	.43	100.
		5.0	23.50	10.0	5.0	.55	100.
		6.0	24.50	10.0	6.0	.60	110.
		7.0	25.50	9.9	7.0	.45	110.
	11h 30m	8.0	25.50	9.9	8.0	.33	130.
		.0	2.50	10.6	.0	.07	40.
		1.0	6.00	10.5	1.0	.04	120.
		2.0	14.50	10.5	2.0	.22	140.
		3.0	17.50	10.5	3.0	.26	110.
		4.0	21.50	10.6	4.0	.31	100.
		5.0	23.00	10.7	5.0	.44	110.
		6.0	24.50	10.7	6.0	.57	110.
	12h 00m	7.0	25.50	10.6	7.0	.33	120.
		7.5	25.50	10.6	7.5	.16	90.
		.0	6.50	10.3	.0	.39	300.
		1.0	7.00	10.2	1.0	.34	300.
		2.0	14.50	10.3	2.0	.15	200.
		3.0	18.50	10.4	3.0	.20	120.
		4.0	22.50	10.4	4.0	.22	100.
		5.0	23.50	10.5	5.0	.17	80.
	12h 15m	6.0	25.00	10.6	6.0	.21	120.
		7.0	26.00	10.5	7.0	.20	120.
		8.0	27.00	10.5	8.0	.12	110.
		.0	5.00	10.5	.0		
		1.0	9.00	10.4	1.0		
		2.0	15.50	10.4	2.0		
		3.0	19.50	10.5	3.0		
		4.0	22.50	10.5	4.0		
		5.0	24.30	10.5	5.0		
		6.0	25.00	10.6	6.0		
		7.0	25.40	10.6	7.0		
		7.7	27.50	10.5	7.7		

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{\infty}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
17/10/77	12h 30m	.0	4.50	10.6	.0	.45	300.
		1.0	6.00	10.4	1.0	.51	320.
		2.0	13.50	10.6	2.0	.00	
		3.0	19.50	10.6	3.0	.06	160.
		4.0	21.70	10.6	4.0	.03	110.
		5.0	23.50	10.6	5.0	.10	160.
		6.0	25.50	10.6	6.0	.11	160.
		7.0	28.00	10.5	7.0	.04	280.
	13h 00m	7.6	28.50	10.4	7.6	.07	310.
		.0	4.00	10.8	.0	.61	290.
		1.0	5.80	10.4	1.0	.66	310.
		2.0	21.30	10.6	2.0	.28	300.
		3.0	22.60	10.6	3.0	.09	300.
		4.0	24.00	10.6	4.0	.00	
		5.0	24.50	10.6	5.0	.10	260.
		6.0	25.30	10.5	6.0	.06	300
	13h 30m	7.0	28.00	10.4	7.0	.19	280.
		7.5	28.50	10.4	7.5	.14	270.
		.0	4.50	10.7	.0	.78	290.
		1.0	7.00	10.4	1.0	.67	290.
		2.0	13.50	10.4	2.0	.85	330.
		3.0	23.00	10.6	3.0	.34	290.
		4.0	26.20	10.6	4.0	.26	290.
		5.0	27.20	10.5	5.0	.27	300.
	14h 00m	6.0	27.80	10.4	6.0	.18	290.
		7.0	27.90	10.4	7.0	.09	290.
		.0	3.50	10.8	.0	1.04	270.
		1.0	4.50	10.4	2.0	.63	310.
		2.0	7.50	10.3	4.0	.24	290.
		3.0	20.00	10.4	6.0	.09	320.
		4.0	26.00	10.6	7.0	.04	300.
		5.0	27.00	10.5			
		6.0	27.50	10.5			
		7.0	27.50	10.5			

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{\text{00}}$ )	TEMP ( $^{\circ}\text{C}$ )	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
17/10/77	14h 30m	.0	3.50	10.4	.0	1.54	280.
		1.0	4.50	10.4	1.0	1.27	320.
		2.0	7.50	10.4	2.0	1.15	300.
		3.0	13.00	10.4	4.0	.34	290.
		4.0	20.00	10.4	6.0	.10	250.
	15h 00m	5.0	26.00	10.4			
		6.0	27.50	10.4			
		7.0	27.50	10.4			
		.0	1.80	10.5	.0	1.52	290.
		1.0	3.20	10.3	1.0	1.22	280.
	16h 00m	2.0	5.70	10.3	2.0	1.04	300.
		3.0	14.00	10.3	4.0	.06	300.
		4.0	22.70	10.4	6.0	.09	80.
		5.0	25.80	10.4			
		6.0	26.10	10.4			
	16h 30m	7.0	27.20	10.5			
		.0	1.50	10.5	.0	1.54	290.
		1.0	2.60	10.4	1.0	1.16	290.
		2.0	4.00	10.4	2.0	1.13	290.
		3.0	14.00	10.4	4.0	.06	280.
	16h 00m	4.0	17.60	10.4	6.0	.09	110.
		5.0	21.60	10.4			
		6.0	22.50	10.4			
		7.0	27.30	10.5			
	16h 30m	.0	1.50	10.4	.0	1.64	270.
		1.0	2.70	10.4	1.0	1.26	290.
		2.0	4.10	10.4	2.0	.69	300
		3.0	11.60	10.4	4.0	.00	
		4.0	18.50	10.4			
	17h 00m	5.0	20.00	10.4			
		6.0	20.40	10.4			
		7.0	22.60	10.4			
		.0	1.80	10.3	.0	1.04	310.
		1.0	2.80	10.3	1.0	.96	300.
		2.0	3.50	10.3	2.0	.68	310.



DATE	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
17/10/77	17 00m	3.0	13.50	10.3	4.0	.09	120.
		4.0	17.00	10.3	5.0	.15	110.
		5.0	17.80	10.3			
		6.0	18.10	10.3			
		7.0	21.50	10.3			
	17h 35m	.0	1.50	10.3	.0	.89	280.
		1.0	2.50	10.4	1.0	.89	280.
		2.0	6.80	10.4	2.0	.62	280.
		3.0	12.80	10.3	3.0	.07	350.
		4.0	14.10	10.3	4.0	.34	70.
		5.0	16.30	10.3	5.0	.27	170.
	18h 00m	6.0	17.80	10.3	6.0	.09	150.
		7.0	18.50	10.3			
		.0	1.80	10.2	.0	.78	270.
		1.0	2.80	10.3	1.0	.78	280.
		2.0	7.50	10.3	2.0	.63	280.
		3.0	11.80	10.3	3.0	.16	290.
	18h 30m	4.0	13.50	10.3	4.0	.03	150.
		5.0	16.00	10.3	6.0	.09	110.
		6.0	16.50	10.3	7.7	.09	120.
		7.0	17.40	10.3			
		7.7	24.50	10.3			
		.0	1.30	10.1	.0	.74	280.
	19h 08m	1.0	2.50	10.3	1.0	.73	290.
		2.0	5.50	10.3	2.0	.61	300.
		3.0	12.00	10.3	4.0	.00	120.
		4.0	13.80	10.3	6.0	.22	120.
		5.0	15.40	10.3	7.5	.22	
		6.0	16.50	10.3			
, 17/10/77	19h 08m	7.0	10.50	10.3			
		7.5	26.00	10.3			
		.0	1.40	10.0	.0	.66	280.
		1.0	2.50	10.3	1.0	.58	280.
, 17/10/77		2.0	9.20	10.3	2.0	.36	280.
		3.0	10.80	10.3	3.0	.04	20.

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (true)
17/10/77	19h 08m	4.0	11.60	10.3	4.0	.04	20.
		5.0	14.90	10.3	5.0	.13	150.
		6.0	18.90	10.4	6.0	.43	100.
		7.0	25.00	10.4	7.0	.37	110.
		7.9	25.80	10.4	7.9	.25	120.
	19h 34m	.0	1.10	10.2	.0	.63	290.
		1.0	2.60	10.3	1.0	.51	300.
		2.0	9.80	10.3	2.0	.26	290.
		3.0	11.30	10.3	3.0	.00	
		4.0	12.50	10.3	4.0	.03	140.
		5.0	13.80	10.4	5.0	.24	120.
		6.0	18.70	10.5	6.0	.47	100.
		7.0	25.30	10.4	7.0	.41	130.
		8.0	27.00	10.4	8.0	.24	110.
	20h 00m	.0	1.30	9.8	.0	.61	310.
		1.0	3.00	10.4	1.0	.57	310.
		2.0	10.50	10.4	2.0	.04	290.
		3.0	12.20	10.4	3.0	.00	
		4.0	13.50	10.3	4.0	.07	170.
		5.0	18.20	10.4	5.0	.25	90.
		6.0	19.50	10.4	6.0	.43	100.
		7.0	23.00	10.4	7.0	.31	100.
		8.0	27.00	10.4	8.0	.16	190.
	20h 30m	.0	1.30	9.8	.0	.62	270.
		1.0	4.00	10.3	1.0	.55	300.
		2.0	10.10	10.3	2.0	.34	280.
		3.0	12.80	10.4	3.0	.30	240.
		4.0	15.70	10.4	4.0	.12	140.
		5.0	17.60	10.5	5.0	.27	100.
		6.0	20.30	10.4	6.0	.31	120.
		7.0	28.30	10.3	7.0	.30	110.
		7.9	28.40	10.3	7.9	.22	120.
	21h 00m	.0	1.10	9.6	.0	.73	300.
		1.0	2.20	10.3	1.0	.67	300.
		2.0	11.00	10.4	2.0	.63	310.
		3.0	15.10	10.4	3.0	.25	260.

DATE	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
17/10/77	21h 00m	4.0	18.10	10.4	4.0	.09	160.
		5.0	19.20	10.4	5.0	.09	150.
		6.0	22.40	10.3	6.0	.30	100.
		7.0	28.40	10.2	7.0	.16	120.
		7.9	29.00	10.2	7.9	.07	80.
		.0	1.10	9.6	.0	.91	290.
		1.0	2.20	10.4	1.0	.78	310.
		2.0	14.30	10.4	2.0	.68	310.
	21h 30m	3.0	18.20	10.4	3.0	.22	300.
		4.0	19.20	10.4	4.0	.06	300.
		5.0	20.50	10.4	5.0	.06	110.
		6.0	24.20	10.4	6.0	.30	110.
		7.0	28.00	10.3	7.0	.14	130.
		7.7	29.20	10.2	7.7	.00	
		.0	.80	9.7	.0	1.08	290.
		1.0	2.30	10.3	1.0	1.07	300.
	22h 03m	2.0	12.50	10.4	2.0	.92	300.
		3.0	19.70	10.4	3.0	.22	300.
		4.0	22.00	10.4	4.0	.00	
		5.0	25.20	10.4	5.0	.00	
		6.0	29.30	10.2	6.0	.30	290.
		7.0	30.00	10.2	7.0	.00	
		7.5	30.00	10.2			
		.0	.70	9.7			
	22h 45m	1.0	2.50	10.4			
		2.0	6.00	10.4			
		3.0	20.00	10.4			
		4.0	25.60	10.4			
		5.0	29.00	10.3			
		6.0	29.80	10.2			
		7.0	29.80	10.2			
		.0	.80	9.9			
	23h 03m	1.0	2.80	10.4	.0	1.52	290.
		2.0	5.00	10.4	2.0	1.52	290.
		3.0	15.60	10.4	4.0	.91	290.
					6.0	.46	290.





DATE	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (true)
18/10/77	00h 00m	.0	.50	10.1			
		1.0	2.00	10.3			
		2.0	4.00	10.3			
		3.0	11.60	10.4			
		4.0	18.50	10.4			
		5.0	22.00	10.4			
	00h 30m	6.0	24.30	10.4			
		6.5	25.00	10.4			
		.0	2.00	10.0	.0	1.52	290.
		1.0	3.30	10.2	2.0	2.13	290.
		2.0	4.20	10.3	4.0	1.53	290.
		3.0	10.50	10.3	5.0	.76	290.
	01h 00m	4.0	15.50	10.4			
		5.0	17.00	10.4			
		6.0	17.50	10.4			
		.0	2.50	10.1	.0	2.32	270.
		1.0	3.50	10.2	2.0	1.84	290.
		2.0	5.50	10.3	4.0	1.22	290.
	01h 16m	3.0	11.30	10.3	5.0	.30	290.
		4.0	14.10	10.3			
		5.0	14.60	10.4			
		6.0	14.70	10.4			
		.0	2.50	10.2			
		1.0	4.20	10.3			
	01h 32m	2.0	6.40	10.3			
		3.0	7.80	10.3			
		4.0	10.50	10.4			
		5.0	11.60	10.4			
		5.8	12.20	10.4			
		.0	4.50	10.3	.0	1.83	280.
		1.0	5.50	10.3	2.0	1.52	280.
		2.0	6.40	10.3	4.0	1.52	280.
		3.0	8.00	10.3	5.0	1.52	280.
		4.0	10.40	10.3			
		5.0	11.60	10.4			
		5.5	12.30	10.4			

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{\infty}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
18/10/77	01h 44m	.0	6.80	10.2			
		1.0	7.00	10.3			
		2.0	7.60	10.3			
		3.0	7.80	10.3			
		4.0	8.60	10.3			
	02h 00m	5.0	8.70	10.3			
		.0	7.00	10.2	.0	1.26	300.
		1.0	7.00	10.3	2.0	1.22	280.
		2.0	7.50	10.3	4.0	1.07	280.
		3.0	7.50	10.3	5.0	.76	280.
	02h 15m	4.0	7.60	10.3			
		5.0	7.60	10.3			
		.0	6.80	10.2			
		1.0	6.80	10.3			
		2.0	6.80	10.3			
	02h 30m	3.0	6.80	10.3			
		4.0	7.00	10.3			
		5.0	7.00	10.3			
		.0	6.50	10.2	.0	1.26	300.
		1.0	6.70	10.2	2.0	1.37	280.
	03h 00m	2.0	6.70	10.2	4.0	1.22	280.
		3.0	6.80	10.2	5.0	1.07	280.
		4.0	6.80	10.2			
		5.0	7.00	10.2			
		.0	6.50	10.2			
	03h 15m	1.0	6.50	10.3			
		2.0	6.50	10.3			
		3.0	6.60	10.3			
		4.0	6.60	10.3			
		5.0	6.60	10.3			
	03h 15m	.0	5.30	10.2			
		1.0	5.40	10.2			
		2.0	5.40	10.2			
		3.0	5.40	10.2			

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{\text{oo}}$ )	TEMP ( $^{\circ}\text{C}$ )	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
18/10/77	03h 15m	4.0	5.40	10.2			
		5.0	5.40	10.2			
	03h 30m	.0	5.00	10.3	.0	.91	280.
		1.0	5.00	10.3	2.0	.91	280.
		2.0	5.10	10.3	4.0	.76	280.
		3.0	5.20	10.3			
		4.0	5.20	10.3			
		5.0	5.20	10.3			
	07h 45m	.0	1.50	10.2	.0	.52	120.
		1.0	1.70	10.2	1.0	.61	100.
		2.0	2.50	10.2	2.0	.55	100.
		3.0	2.50	10.2	3.0	.50	110.
		4.0	2.40	10.2	4.0	.45	100.
		5.0	2.40	10.2	5.0	.46	100.
		6.0	2.40	10.3	6.0	.43	110.
		7.0	2.50	10.3	7.0	.39	190.
	08h 30m	.0	2.50	10.2	.0	.52	130.
		1.0	2.50	10.2	1.0	.55	100.
		2.0	4.10	10.2	2.0	.58	100.
		3.0	4.10	10.2	3.0	.61	100.
		4.0	4.20	10.2	4.0	.61	90.
		5.0	4.50	10.2	5.0	.69	110.
		6.0	5.70	10.2	6.0	.66	110.
		7.0	10.20	10.2	7.0	.68	130.
		7.7	11.40	10.2	7.7	.74	120.
	09h 00m	.0	3.00	10.2	.0	.46	110.
		1.0	3.50	10.2	1.0	.55	70.
		2.0	3.80	10.2	2.0	.55	80.
		3.0	4.30	10.2	3.0	.56	70.
		4.0	5.20	10.2	4.0	.63	100.
		5.0	7.00	10.2	5.0	.69	100.
		6.0	10.60	10.2	6.0	.79	100.
		7.0	20.00	10.2	7.0	.89	100.
		7.8	20.40	10.2	7.8	.66	120.

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
18/10/77	09h 32m	.0	4.80	10.2	.0	.40	80.
		1.0	4.90	10.2	1.0	.43	90.
		2.0	5.00	10.2	2.0	.42	90.
		3.0	5.20	10.2	3.0	.44	90.
		4.0	5.50	10.2	4.0	.58	90.
		5.0	6.00	10.2	5.0	.63	90.
		6.0	8.0	10.2	6.0	.70	100.
		7.0	21.60	10.2	7.0	.83	100.
	10h 00m	8.0	23.50	10.2	8.0	.74	110.
		.0	5.00	10.2	.0	.43	110.
		1.0	5.50	10.2	1.0	.41	80.
		2.0	6.00	10.2	2.0	.34	80.
		3.0	6.20	10.2	3.0	.40	80.
		4.0	6.50	10.2	4.0	.34	90.
		5.0	8.50	10.2	5.0	.52	70.
		6.0	16.00	10.3	6.0	.87	100.
	10h 30m	7.0	22.70	10.4	7.0	.87	110.
		8.0	23.80	10.4	8.0	.67	110.
		.0	6.80	10.2	.0	.34	90.
		1.0	6.80	10.2	1.0	.39	100.
		2.0	6.80	10.2	2.0	.34	100.
		3.0	6.80	10.2	3.0	.44	90.
		4.0	7.50	10.2	4.0	.49	80.
		5.0	8.20	10.2	5.0	.59	80.
	11h 05m	6.0	21.20	10.4	6.0	.66	110.
		7.0	24.40	10.4	7.0	.63	100.
		8.0	24.70	10.4	8.0	.44	110.
		8.4	24.70	10.4	8.4	.48	110.
		.0	7.00	10.2	.0	.07	150.
		1.0	7.00	10.2	1.0	.16	110.
		2.0	7.70	10.2	2.0	.26	90.
		3.0	8.50	10.2	3.0	.31	90.
		4.0	8.70	10.2	4.0	.38	90.
		5.0	17.50	10.2	5.0	.58	100.
		6.0	29.40	10.4	6.0	.49	110.
		7.0	29.80	10.4	7.0	.37	100.
		8.0	30.00	10.4	8.0	.25	100.
		8.4	30.00	10.4	8.4	.31	100.



DATE (Location)	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
18/10/77 (Tilbury)	14h 30m	.0	.20	10.4	.0	.48	260.
		1.0	.20	10.4	1.0	.46	260.
		2.0	.20	10.4	2.0	.48	260.
		3.0	.20	10.4	3.0	.48	260.
		4.0	.20	10.4	4.0	.48	240.
		5.0	.30	10.4	5.0	.47	230.
		6.0	.40	10.4	6.0	.45	230.
		7.0	.40	10.4	7.0	.40	260.
		8.0	.40	10.4	8.0	.39	250.
		9.0	.50	10.4	9.0	.39	250.
		10.0	.50	10.4	10.0	.31	250.
		11.0	.60	10.4	11.0	.22	250.
	15h 00m	11.5	.60	10.4	11.5	.30	250.
		.0	.20	10.4	.0	.67	270.
		2.0	.20	10.4	2.0	.66	270.
		4.0	.20	10.4	4.0	.58	270.
		6.0	.20	10.4	6.0	.49	260.
		8.0	.20	10.4	8.0	.52	260.
		10.0	.20	10.4	10.0	.50	240.
		11.3	.20	10.4	11.3	.52	250.
		.0	.20	10.4	.0	.68	270.
		1.0	.20	10.4	1.0	.58	270.
		2.0	.20	10.4	2.0	.61	250.
		4.0	.20	10.4	4.0	.55	250.
	15h 30m	6.0	.20	10.4	6.0	.48	270.
		8.0	.20	10.4	8.0	.43	290.
		10.0	.20	10.4	10.0	.48	260.
		11.0	.20	10.4	11.0	.48	260.
		11.3	.20	10.4	11.3	.41	260.
		.0	.20	10.4	.0	.69	270.
		1.0	.20	10.4	1.0	.63	270.
		2.0	.20	10.4	2.0	.63	190.
		4.0	.20	10.4	4.0	.48	190.
		6.0	.20	10.4	6.0	.63	260.
		8.0	.20	10.4	8.0	.58	260.
		10.0	.20	10.4	10.0	.46	250.
		11.3	.20	10.4	11.3	.34	260.
	17h 00m	.0	.20	10.4	.0	.69	270.
		2.0	.20	10.4	2.0	.63	270.
		4.0	.20	10.4	4.0	.48	190.
		6.0	.20	10.4	6.0	.63	260.
		8.0	.20	10.4	8.0	.58	260.
		10.0	.20	10.4	10.0	.46	250.
		11.0	.20	10.4	11.0	.34	260.
		11.3	.20	10.4	11.3	.34	260.
		.0	.20	10.4	.0	.69	270.
		2.0	.20	10.4	2.0	.63	270.
		4.0	.20	10.4	4.0	.48	190.
		6.0	.20	10.4	6.0	.63	260.

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
18/10/77	17h 30m				.0	.63	320.
					2.0	.61	280.
					4.0	.63	280.
					6.0	.55	260.
					8.0	.48	220.
					10.0	.52	210.
					12.0	.55	250.
	18h 00m				.0	.48	280.
					2.0	.46	290.
					4.0	.50	240.
					6.0	.48	270.
					8.0	.31	240.
					10.0	.30	250.
					12.0	.30	250.
	18h 30m				.0	.48	270.
					2.0	.41	270.
					4.0	.30	250.
					6.0	.30	260.
					8.0	.30	250.
					10.0	.24	240.
					11.0	.24	250.
	19h 00m				.0	.31	260.
					2.0	.30	270.
					4.0	.27	240.
					6.0	.27	270.
					8.0	.39	250.
					10.0	.32	270.
					11.0	.15	260.
	19h 30m				.0	.22	290.
					2.0	.34	250.
					4.0	.18	220.
					6.0	.14	240.
					8.0	.19	260.
					10.0	.19	230.
					11.0	.36	230.

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
18/10/77	20h 00m					.17	280.
					.0	.18	250.
					2.0	.14	250.
					4.0	.17	260.
					6.0	.17	270.
					8.0	.06	280.
					10.0	.09	110.
					11.0	.20	240.
					.0	.14	320.
					2.0	.09	250.
					4.0	.12	240.
	21h 00m				6.0	.17	250.
					8.0	.14	260.
					10.0	.03	290.
					11.0	.13	260.
				10.2	.0	.16	270.
				10.2	2.0	.16	260.
				10.2	4.0	.10	230.
				10.2	6.0	.13	230.
				10.2	8.0	.13	260.
				10.2	10.0	.06	210.
				10.2	11.5		
	21h 30m						
						.21	260.
					.0	.15	270.
					2.0	.15	260.
					4.0	.15	350.
					6.0	.17	240.
					8.0	.15	240.
					10.0	.61	20.
					11.7		
	21h 45m						
					.0	.22	250.
					4.0	.19	270.
					8.0	.16	240.
					9.0	.22	250.
					10.0	.26	260.

DATE	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
18/10/77	21h 45m	9.0	.00	10.3	11.7	.00	
		10.0	.00	10.3			
		11.0	5.00	10.3			
		11.7	17.00	10.3			
	22h 00m	.0	.00	10.3	.0	.18	260.
		2.0	.00	10.3	2.0	.24	250.
		4.0	.00	10.3	4.0	.22	280.
		6.0	.00	10.3	6.0	.22	280.
		8.0	.00	10.3	8.0	.22	240.
		9.0	.00	10.3	10.0	.19	230.
		10.0	.70	10.3	11.7	.52	40.
		11.0	4.50	10.3			
		11.7	17.00	10.3			
	22h 45m	.0	.00	10.3	.0	.43	270.
		2.0	.00	10.3	2.0	.30	250.
		4.0	.00	10.3	4.0	.39	280.
		6.0	.00	10.3	6.0	.43	270.
		8.0	.20	10.3	8.0	.38	240.
		10.0	1.50	10.3	10.0	.15	210.
		11.0	3.00	10.3	11.5	.66	30.
		11.5	18.00	10.3			
	23h 00m	.0	.00	10.3	.0	.43	290.
		2.0	.00	10.3	2.0	.37	290.
		4.0	.00	10.3	4.0	.46	290.
		6.0	.00	10.3	6.0	.30	260.
		8.0	.00	10.3	8.0	.34	280.
		10.0	2.00	10.3	10.0	.39	240.
		11.0	5.00	10.3	11.0	.61	30.
		11.2	17.50	10.4			
	23h 35m	.0	.00	10.2			
		1.0	.00	10.2			
		2.0	.00	10.2			
		3.0	.00	10.2			
		4.0	.00	10.2			
		5.0	.00	10.2			





DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
19/10/77	09h 30m				8.0	.31	60.
					10.0	.30	80.
					11.0	.33	70.
	10h 00m				.0	.61	40.
					2.0	.59	40.
					4.0	.63	50.
					6.0	.53	50.
					8.0	.56	40.
					10.0	.54	70.
	10h 30m				11.0	.48	60.
					.0	.75	30.
					2.0	.68	30.
					4.0	.63	50.
					6.0	.49	50.
					8.0	.49	70.
					10.0	.41	60.
					11.0	.39	70.

DATE (Location)	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
23/11/77 (Oak St. Bridge)	12h 00m	.0	.00	3.0	.0	.00	
		1.0	1.00	3.2	2.0	.04	240.
		2.0	1.00	3.2	4.0	.00	
		3.0	1.50	3.2	6.0	.10	80.
		4.0	2.20	3.4	7.2	.07	230.
	12h 30m	5.0	3.00	3.5			
		6.0	4.00	3.7			
		7.0	5.00	3.8			
		7.2	5.50	3.8			
		.0	.50	3.1	.0	.03	250.
	13h 00m	1.0	.50	3.1	2.0	.00	
		2.0	1.00	3.1	3.0	.04	40.
		3.0	1.50	3.2	4.0	.06	10.
		4.0	1.75	3.2	5.0	.10	30.
		5.0	3.00	3.4	6.0	.15	70.
	13h 30m	6.0	3.75	3.6	7.0	.04	60.
		7.0	7.00	3.8	7.2	.00	
		7.2	7.80	4.0			
		.0	1.00	2.7	.0	.03	300.
		1.0	1.00	3.2	1.0	.04	240.
		2.0	1.00	3.2	2.0	.00	
		3.0	1.80	3.3	3.0	.04	60.
		4.0	2.50	3.4	4.0	.09	50.
		5.0	3.00	3.4	5.0	.22	80.
		6.0	4.00	3.5	6.0	.24	70.
	13h 30m	7.0	7.00	4.0	7.0	.13	80.
		7.4	10.60	4.2	7.4	.00	
		.0	.50	2.0	.0	.03	340.
		1.0	1.00	3.2	1.0	.04	80.
		2.0	2.40	3.4	2.0	.04	70.
		3.0	2.80	3.4	3.0	.16	100.
		4.0	3.50	3.5	4.0	.24	60.
		5.0	4.40	3.6	5.0	.25	80.
		6.0	7.50	4.0	6.0	.25	60.
		7.0	11.70	4.2	7.0	.25	50.
		7.7	15.80	5.1	7.7	.03	330.

DATE	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
23/11/77	14h 00m	.0	2.00	1.5	.0	.09	60
		1.0	2.30	2.6	1.0	.12	60.
		2.0	2.50	3.2	2.0	.17	80.
		3.0	4.50	3.5	3.0	.22	70.
		4.0	5.40	3.8	4.0	.22	70.
		5.0	6.50	3.9	5.0	.30	60.
		6.0	8.00	4.2	6.0	.19	30.
		7.0	13.50	4.7	7.0	.16	40.
	14h 35m	7.8	17.30	5.2	7.8	.03	280.
		.0	1.50	2.0	.0	.25	60.
		1.0	1.60	2.9	1.0	.22	110.
		2.0	5.00	3.4	2.0	.25	60.
		3.0	5.50	3.6	3.0	.25	60.
		4.0	6.00	3.8	4.0	.28	60.
		5.0	7.50	4.0	5.0	.25	60.
		6.0	11.50	4.6	6.0	.22	60.
	15h 02m	7.0	15.50	5.2	7.0	.03	60.
		7.8	22.50	5.8	7.8	.03	200.
		.0	2.00	1.7	.0	.22	60.
		1.0	3.70	3.3	1.0	.28	70.
		2.0	5.80	3.7	2.0	.19	40.
		3.0	6.20	3.9	3.0	.19	40.
		4.0	8.00	4.1	4.0	.20	70.
		5.0	9.00	4.2	5.0	.19	40.
	15h 35m	6.0	12.20	4.6	6.0	.19	40.
		7.0	16.40	5.2	7.0	.11	40.
		8.0	19.80	5.4	8.0	.04	230.
		.0	.30	2.8	.0	.00	
		1.0	5.00	3.4	2.0	.13	70.
		2.0	6.80	3.8	4.0	.17	70.
		3.0	7.50	4.0	6.0	.09	60.
		4.0	10.50	4.2	8.0	.03	240.
		5.0	10.80	4.4			
		6.0	16.50	5.2			
		7.0	20.30	5.7			
		8.0	21.50	6.0			



DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{\infty}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
23/11/77	16h 05m	.0	.80	3.1	.0	.04	360.
		1.0	4.40	3.5	2.0	.03	240.
		2.0	5.30	3.6	4.0	.10	40.
		3.0	8.80	4.2	6.0	.03	210.
		4.0	11.00	4.5	8.0	.03	340.
		5.0	13.50	4.8			
		6.0	15.20	5.0			
		7.0	18.50	5.4			
	16h 35m	8.0	22.10	6.0			
		8.2	22.10	6.0			
		.0	3.00	3.3	.0	.09	240.
		1.0	3.50	3.4	2.0	.22	240.
		2.0	5.00	3.5	4.0	.04	240.
		3.0	10.30	4.0	6.0	.09	240.
		4.0	12.60	4.4	8.0	.00	
		5.0	14.00	4.6			
	17h 03m	6.0	18.00	5.0			
		7.0	20.20	5.6			
		8.0	22.00	6.0			
		.0	2.80	2.7	.0	.27	250.
		1.0	3.40	3.2	2.0	.36	230.
		2.0	6.10	3.6	4.0	.14	230.
		3.0	8.80	4.0	6.0	.16	220.
		4.0	14.40	4.8	8.0	.04	200.
	17h 30m	5.0	14.80	4.9			
		6.0	22.00	6.0			
		7.0	22.40	6.1			
		8.0	22.50	6.1			
		.0	2.00	3.0	.0	.31	250.
		1.0	2.50	3.1	2.0	.37	200.
		2.0	3.70	3.2	4.0	.37	210.
		3.0	10.30	4.2	6.0	.19	210.
		4.0	15.00	4.6	7.7	.04	340.
		5.0	18.50	5.5			
		6.0	22.00	6.0			
		7.0	22.50	6.1			
		7.0	22.50	6.1			

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{\text{00}}$ )	TEMP ( $^{\circ}\text{C}$ )	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
23/11/77	18h 00m	.0	2.50	3.0	.0	.44	240.
		1.0	2.60	3.2	2.0	.43	200.
		2.0	4.00	3.4	4.0	.25	230.
		3.0	6.60	3.7	6.0	.19	230.
		4.0	17.50	5.2	7.5	.10	260.
		5.0	18.40	5.7			
		6.0	22.20	5.9			
	18h 34m	7.0	22.70	6.1			
		7.5	22.70	6.1			
		.0	2.00	2.9	.0	.51	230.
		1.0	2.10	3.2	2.0	.44	180.
		2.0	2.50	3.2	4.0	.61	230.
		3.0	5.00	3.5	7.0	.24	220.
		4.0	10.00	4.0			
	19h 00m	5.0	18.50	5.1			
		6.0	19.50	5.6			
		7.0	22.00	6.0			
		7.3	22.50	6.0			
		.0	2.20	2.9	.0	.55	200.
		1.0	2.50	3.1	1.0	.55	220.
		2.0	2.70	3.1	3.0	.37	220.
	19h 30m	3.0	7.50	3.6	5.0	.33	230.
		4.0	11.70	4.4	7.0	.14	250.
		5.0	15.00	4.8			
		6.0	19.80	5.1			
		7.0	21.20	5.8			
		.0	2.00	3.2	.0	.49	250.
		1.0	2.00	3.2	1.0	.61	240.
		2.0	2.10	3.2	3.0	.55	230.
		3.0	5.00	3.5	5.0	.55	240.
		4.0	11.50	4.2	6.8	.14	270.
		5.0	13.20	4.8			
		6.0	17.10	5.1			
		6.8	19.00	5.7			

DATE	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
23/11/77	20h 00m	.0	2.00	3.2	.0	.55	230.
		1.0	2.50	3.2	2.0	.61	220.
		2.0	2.70	3.2	3.0	.56	220.
		3.0	3.50	3.3	4.0	.46	230.
		4.0	4.60	3.4	6.0	.32	240.
		5.0	6.50	4.0			
	20h 30m	6.0	12.10	4.6			
		6.6	14.90	4.8			
		.0	2.10	2.8	.0	.43	220.
		1.0	2.30	3.2	2.0	.46	230.
		2.0	2.30	3.2	3.0	.46	220.
		3.0	2.50	3.2	5.0	.37	220.
	21h 00m	4.0	2.40	3.2	6.0	.13	260.
		5.0	4.50	3.4			
		6.0	6.50	3.8			
		7.0	9.00	4.2			
		7.3	9.70	4.2			
		.0	1.80	3.1	.0	.46	240.
	21h 30m	1.0	1.80	3.1	1.0	.43	230.
		2.0	1.80	3.1	4.0	.30	230.
		3.0	2.50	3.1	5.0	.25	250.
		4.0	2.60	3.2	5.9	.25	240.
		5.0	3.80	3.4			
		5.9	4.60	3.5			
	21h 33m	.0	1.40	3.0	.0	.47	240.
		1.0	1.40	3.0	1.0	.40	230.
		2.0	1.40	3.0	3.0	.50	230.
		3.0	1.40	3.0	5.0	.30	230.
		4.0	1.40	3.0	5.6	.25	220.
		5.0	1.40	3.0			
	21h 33m	5.6	1.40	3.0			
		.0	1.40	3.0	.0	.47	240.
		1.0	1.40	3.0	1.0	.40	230.
		2.0	1.40	3.0	3.0	.50	230.
		3.0	1.40	3.0	5.0	.30	230.

DATE	TIME (PST)	DEPTH (m)	SALINITY (°/00)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
23/11/77	21h 33m	4.0	1.40	3.0	5.5	.25	220.
		5.0	1.40	3.0			
		5.9	1.40	3.0			
	22h 20m	.0	.50	2.8	.0	.58	230.
		1.0	.50	2.8	2.0	.44	240.
		2.0	.50	2.8	3.0	.43	240.
		3.0	.50	2.8	5.0	.25	230.
		4.0	.50	2.8			
	23h 15m	5.0	.50	2.8			
		5.8	.50	2.8			
		.0	.50	2.8	.0	.34	230.
		1.0	.50	2.8	2.0	.30	20.
		2.0	.50	2.8	4.0	.29	210.
24/11/77	23h 45m	3.0	.50	2.8	5.7	.24	220.
		4.0	.50	2.8			
		5.0	.50	2.8			
		5.7	.50	2.8			
		.0	.30	2.6	.0	.26	240.
	05h 04m	1.0	.30	2.6	2.0	.25	230.
		2.0	.30	2.6	4.0	.27	220.
		3.0	.30	2.6	5.5	.23	230.
		4.0	.30	2.6			
		5.0	.30	2.6			
		5.5	.30	2.6			
		.0	4.80	3.4	.0	.03	100.
		1.0	4.80	3.4	2.0	.25	90.
		2.0	5.00	3.5	4.0	.39	70.
		3.0	5.00	3.5	5.0	.36	60.
		4.0	5.20	3.5	8.0	.20	40.
		5.0	5.20	3.5	8.5	.15	60.
		6.0	5.30	3.6			
		7.0	6.30	3.7			
		8.0	6.40	3.7			
		8.5	6.40	3.7			



DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{\infty}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
24/11/77	05h 30m	.0	5.20	3.5	.0	.06	60.
		1.0	5.50	3.5	2.0	.12	70.
		2.0	5.60	3.6	4.0	.24	70.
		3.0	5.80	3.6	6.0	.08	80.
		4.0	6.00	3.6	8.0	.37	60.
		5.0	6.10	3.6	8.4	.24	30.
		6.0	6.30	3.6			
		7.0	6.60	3.7			
	06h 08m	8.0	7.70	3.9			
		8.4	7.70	3.9			
		.0	6.50	3.7	.0	.04	70.
		1.0	6.60	3.8	2.0	.00	
		2.0	6.80	3.8	4.0	.13	30.
		3.0	6.90	3.8	6.0	.10	40.
		4.0	7.10	3.8	8.0	.09	50.
		5.0	7.70	3.9	8.4	.03	20.
	06h 30m	6.0	7.80	3.9			
		7.0	9.00	4.0			
		8.0	11.50	4.2			
		8.4	11.70	4.4			
		.0	7.20	3.8	.0	.04	70.
		1.0	7.50	3.8	2.0	.03	150.
		2.0	7.70	3.8	4.0	.03	30.
		3.0	8.00	3.9	6.0	.05	220.
	07h 00m	4.0	8.30	3.9	8.0	.01	280.
		5.0	8.60	4.0	8.3	.01	280.
		6.0	9.00	4.0			
		7.0	9.50	4.0			
		8.0	10.50	4.1			
		8.0	10.90	4.1			
		.0	7.30	3.8	.0	.03	160.
		1.0	8.70	3.9	2.0	.06	130.
		2.0	9.30	4.0	4.0	.00	
		3.0	9.80	4.0	6.0	.03	50.
		4.0	11.00	4.2	8.0	.02	310.
		5.0	12.20	4.4	8.3	.02	210.

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{\infty}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
24/11/77	07h 00m	6.0	13.50	4.6			
		7.0	15.10	4.8			
		8.0	15.60	4.9			
		8.3	15.60	4.9			
		.0	6.00	3.3	.0	.25	250.
	07h 35m	1.0	6.80	3.7	2.0	.13	140.
		2.0	7.70	3.8	4.0	.03	150.
		3.0	10.70	4.1	6.0	.04	30.
		4.0	11.20	4.2	8.0	.03	250.
		5.0	13.60	4.4			
		6.0	15.80	4.8			
		7.0	16.60	5.0			
		8.0	18.40	5.1			
		8.2	18.40	5.3			
	08h 03m	.0	6.60	3.7	.0	.19	230.
		1.0	7.00	3.8	2.0	.25	250.
		2.0	7.50	3.8	4.0	.06	250.
		3.0	8.30	3.9	6.0	.02	320.
		4.0	12.00	4.2	8.0	.03	240.
		5.0	13.80	4.5			
		6.0	15.80	4.8			
		7.0	16.90	5.0			
		8.0	18.10	5.3			
	08h 35m	.0	6.60	3.7	2.0	.30	200.
		1.0	7.20	3.8	4.0	.37	230.
		2.0	7.80	3.9	6.0	.12	250.
		3.0	9.80	4.1	7.8	.04	280.
		4.0	11.20	4.3			
		5.0	15.60	4.6			
		6.0	17.70	5.2			
		7.0	19.10	5.3			
		7.8	19.60	5.6			
	09h 05m	.0	5.50	3.6	.0	.49	240.
		1.0	5.90	3.6	2.0	.55	200.
		2.0	7.50	3.8	4.0	.37	200.

DATE	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
24/11/77	09h 05m	3.0	10.00	4.2	6.0	.34	220.
		4.0	10.80	4.3	7.7	.02	270.
		5.0	13.80	4.6			
		6.0	19.60	5.5			
		7.0	19.80	5.6			
		7.7	19.90	5.6			
	09h 30m	.0	4.90	3.4	.0	.46	260.
		1.0	5.20	3.5	2.0	.43	210.
		2.0	6.50	3.6	4.0	.43	210.
		3.0	7.80	3.8	6.0	.16	210.
		4.0	10.00	4.2	7.6	.09	290.
		5.0	14.00	4.4			
		6.0	19.10	5.4			
		7.0	19.80	5.5			
		7.6	20.00	5.6			
	10h 08m	.0	4.50	3.4	.0	.40	230.
		1.0	4.60	3.4	2.0	.43	240.
		2.0	5.10	3.4	4.0	.43	230.
		3.0	7.20	3.6	6.0	.13	230.
		4.0	8.80	3.9	7.3	.04	100.
		5.0	12.20	4.4			
		6.0	15.20	4.8			
		7.0	18.50	5.3			
		7.3	18.80	5.4			
	10h 30m	.0	3.70	3.3	.0	.41	240.
		1.0	4.40	3.4	2.0	.37	240.
		2.0	4.60	3.4	4.0	.37	240.
		3.0	6.50	3.6	6.0	.04	200.
		4.0	8.00	3.8	7.0	.10	
		5.0	11.00	4.2			
		6.0	13.00	4.5			
		7.0	17.00	4.9			
		7.2	17.40	5.0			

DATE	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
24/11/77	11h 00m	.0	2.80	3.2	.0	.45	240.
		1.0	3.10	3.2	2.0	.26	230.
		2.0	3.20	3.2	4.0	.28	230.
		3.0	4.20	3.3	6.0	.03	20.
		4.0	7.20	3.7	7.3	.04	340.
		5.0	9.30	4.2			
		6.0	12.10	4.3			
		7.0	13.60	4.5			
		7.3	14.20	4.7			
		.0	2.70	3.2	.0	.39	240.
	11h 32m	1.0	2.80	3.2	2.0	.30	220.
		2.0	2.80	3.2	4.0	.24	250.
		3.0	3.40	3.2	6.0	.02	250.
		4.0	5.00	3.4	7.1	.02	310.
		5.0	8.40	3.8			
		6.0	9.50	4.0			
		7.0	10.40	4.2			
		7.1	10.70	4.2			



DATE (Location)	TIME (PST)	DEPTH (m)	SALINITY ( $\sigma_{\theta}/\theta_0$ )	TEMP ( $^{\circ}\text{C}$ )	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
14/12/77 (S21)	16h 35m	0	1.00	3.3	0	1.08	260.
		1.0	2.20	3.4	1.0	.74	250.
		2.0	3.50	3.5	2.0	.61	250.
		3.0	4.80	3.7	3.0	.61	270.
		4.0	7.50	4.0			
		5.0	11.80	4.5			
		6.0	15.20	4.9			
		7.0	17.10	5.4			
		8.0	20.10	5.7			
		8.5	23.30	6.0			
	18h 00m	0	.50	3.7	0	.61	250.
		1.0	1.70	3.3	2.0	.61	300.
		2.0	2.20	3.3	4.0	.24	280.
		3.0	3.10	3.4	6.0	.03	100.
		4.0	7.10	3.7	8.0	.30	70.
		5.0	11.00	4.1	9.0	.30	70.
		6.0	17.10	4.7			
		7.0	17.20	5.0			
		8.0	22.40	5.2			
		9.0	29.20	6.4			
	18h 30m	9.4	29.20	6.5			
		0	.50	.0	0	.61	310.
		1.0	1.20	.0	1.0	.61	300.
		2.0	2.00	.0	2.0	.61	310.
		3.0	2.70	.0	3.0	.61	310.
		4.0	5.50	.0	4.0	.30	330.
		5.0	8.50	4.5	6.0	.00	
		6.0	11.70	4.7	8.0	.06	60.
		7.0	12.30	4.8			
		8.0	12.80	5.2			
	19h 00m	9.0	24.00	6.3			
		9.7	24.70	6.4			
		0	1.00	3.4	0	.68	300.
		1.0	1.50	3.3	1.0	.62	320.
		2.0	2.00	3.3	2.0	.61	320.
		3.0	2.70	3.4	3.0	.61	320.

DATE	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
14/12/77	19h 00m	4.0	6.70	3.7	4.0	.30	320.
		5.0	10.50	4.2	6.0	.09	290.
		6.0	12.60	4.7	8.0	.24	100.
		7.0	14.00	4.8	9.0	.30	100.
		8.0	25.00	5.6			
		9.0	25.50	6.6			
		9.6	25.80	6.6			
		.0	.70	3.2	.0	.61	290.
	19h 30m	1.0	1.00	3.3	1.0	.61	280.
		2.0	2.00	3.3	2.0	.61	280.
		3.0	2.50	3.4	3.0	.61	280.
		4.0	6.80	3.8	4.0	.19	280.
		5.0	11.80	4.6	5.0	.00	300.
		6.0	13.00	4.7	6.0	.00	
		7.0	17.70	5.3	8.0	.12	140.
		8.0	25.80	6.2	9.0	.06	150.
	20h 00m	9.0	27.70	6.8	9.8	.00	
		9.8	27.70	6.9			
		.0	.70	3.2	.0	.92	280.
		1.0	1.20	3.3	1.0	.61	280.
		2.0	2.00	3.3	2.0	.61	280.
		3.0	2.20	3.4	3.0	.61	300.
		4.0	7.00	3.7	6.0	.30	330.
		5.0	14.20	4.5	8.0	.06	110.
	20h 30m	6.0	15.00	5.0			
		7.0	19.30	5.2			
		8.0	29.20	6.8			
		9.0	29.40	7.2			
		9.5	29.10	7.2			
		.0	.50	3.3	.0	.78	270.
		1.0	.70	3.3	1.0	.61	270.
		2.0	.80	3.3	2.0	.61	280.
		3.0	2.50	3.3	3.0	.61	310.
		4.0	4.50	3.5	4.0	.61	320.
		5.0	11.00	4.3	6.0	.14	320.
		6.0	15.40	5.0	8.0	.14	130.

DATE	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
14/12/77	20h 30m	7.0	21.10	5.3	9.0	.09	90.
		8.0	29.50	7.1	9.4	.09	100.
		9.0	29.50	7.2			
		9.4	29.50	7.2			
	21h 00m	.0	.70	3.3	.0	.61	250.
		1.0	1.00	3.3	2.0	.61	240.
		2.0	1.50	3.4	4.0	.55	300.
		3.0	3.20	3.4	6.0	.09	330.
		4.0	8.50	3.8	8.0	.00	
		5.0	21.00	4.5	9.0	.00	
		6.0	25.50	5.9			
		7.0	28.40	6.8			
		8.0	28.40	7.2			
		9.0	28.30	7.2			
		9.4	28.30	7.2			
	21h 30m	.0	.40	3.4	.0	.93	250.
		1.0	.80	3.4	1.0	.64	230.
		2.0	1.30	3.4	2.0	.61	250.
		3.0	3.10	3.4	3.0	.61	250.
		4.0	8.00	3.9	4.0	.61	330.
		5.0	23.50	4.4	6.0	.36	290.
		6.0	28.50	6.9	7.0	.06	290.
		7.0	28.60	7.2	8.0	.00	
		8.0	28.60	7.2	8.9	.00	
		8.9	28.70	7.2			
	22h 00m	.0	.60	3.4	.0	.61	240.
		1.0	.80	3.4	1.0	.61	240.
		2.0	2.50	3.5	2.0	.61	240.
		3.0	3.30	3.6	3.0	.00	
		4.0	5.50	3.7	4.0	.00	
		5.0	14.50	4.7	8.0	.00	
		6.0	22.50	5.7			
		7.0	29.00	7.0			
	22h 30m	.0	.60	3.5			
		1.0	.80	3.5			

DATE	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
14/12/77	22h 30m	2.0	2.10	3.6			
		3.0	2.90	3.6			
	22h 35m	4.0	4.00	3.8			
		5.0	14.20	4.6			
		6.0	24.00	5.6			
		7.0	29.20	6.8			
		.0	.60	3.5	1.40		280.
		1.0	.60	3.5	.58		300.
		2.0	1.00	3.6	.64		300.
		3.0	2.40	3.6	.43		280.
		4.0	3.20	3.7			
		5.0	6.00	3.9			
	23h 00m	6.0	15.80	4.8			
		7.0	24.30	6.2			
		8.0	30.00	7.0			
		9.0	30.00	7.3			
		.0	.50	3.7	1.49		250.
		1.0	.90	3.8	.61		250.
		2.0	1.80	3.8	.63		240.
	23h 40m	3.0	2.30	3.8	.00		
		4.0	3.80	3.8			
		5.0	8.80	4.2			
		6.0	13.20	4.8			
		7.0	22.60	6.0			
		8.0	31.40	7.2			
		8.4	31.40	7.2			
		.0	.60	3.8	1.62		280.
		1.0	1.40	3.8	.58		80.
		2.0	1.70	3.8	.00		
		3.0	2.50	3.9			
		4.0	4.00	4.0			
		5.0	7.30	4.3			
		6.0	8.10	4.5			
		7.0	16.50	5.1			
		8.0	30.10	7.3			
		8.2	30.10	7.3			



DATE	TIME (PST)	DEPTH (m)	SALINITY (‰/00)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
14/12/77	24h 00m	.0	.50	3.8	.0	1.49	290.
		1.0	1.60	3.8	2.0	.64	310.
		2.0	2.20	3.9	3.0	.62	290.
		3.0	3.00	4.0	8.0	.24	110.
		4.0	3.40	4.3			
		5.0	5.10	4.8			
		6.0	6.50	5.4			
		7.0	14.40	6.2			
15/12/77	00h 30m	8.0	27.50	6.9			
		.0	2.50	4.0	.0	1.10	250.
		1.0	2.50	4.0	1.0	.73	240.
		2.0	2.60	4.0	2.0	.61	160.
		3.0	2.70	4.0	3.0	.61	160.
		4.0	3.00	4.0	5.0	.61	340.
		5.0	4.30	4.1	7.0	.61	330.
		6.0	5.00	4.2	7.7	.55	290.
	01h 00m	7.0	8.80	4.4			
		7.7	16.40	5.4			
		.0	1.70	3.9	.0	.91	250.
		1.0	1.70	3.9	2.0	.61	210.
		2.0	1.70	3.9	4.0	.61	230.
		3.0	1.80	3.9	6.0	.56	320.
		4.0	1.90	3.9	7.0	.58	310.
		5.0	2.00	3.9			
	01h 03m	6.0	2.00	3.9			
		7.0	2.00	3.9			
		.0	1.70	3.9			
		1.0	1.80	3.9			
		2.0	1.90	3.9			
		3.0	1.90	3.9			
		4.0	1.90	3.9			
		5.0	2.00	3.9			
		6.0	2.00	3.9			
		7.0	2.00	3.9			
		7.5	2.00	3.9			

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
15/12/77	01h 30m	.0	.20	3.8	.0	.76	240.
		1.0	.20	3.8	2.0	.61	210.
		2.0	.30	3.8	4.0	.61	290.
		3.0	.30	3.8	6.0	.61	290.
		4.0	.30	3.8	7.0	.61	290.
		5.0	.40	3.8			
		6.0	.50	3.8			
	02h 00m	7.0	3.70	3.8			
		7.3	6.00	4.2			
		.0	.20	3.7	.0	1.52	310.
		1.0	.20	3.7	1.0	.67	240.
		2.0	.20	3.7	2.0	.67	200.
		3.0	.20	3.7	3.0	.67	280.
		4.0	.20	3.7	4.0	.67	320.
	02h 30m	5.0	.20	3.7	6.0	.55	290.
		6.0	.20	3.7			
		7.0	.20	3.7			
		7.5	.70	3.7			
		.0	.20	3.7	.0	1.10	280.
		1.0	.20	3.7	1.0	.62	240.
		2.0	.20	3.7	2.0	.62	220.
	03h 00m	3.0	.20	3.7	3.0	.61	250.
		4.0	.20	3.7	4.0	.61	250.
		5.0	.20	3.7	6.0	.61	290.
		6.0	.20	3.7	6.8	.61	290.
		6.8	.20	3.7			
		.0	.20	3.7	.0	.95	290.
		1.0	.20	3.7	1.0	.67	310.
		2.0	.20	3.7	2.0	.61	310.
		3.0	.20	3.7	3.0	.61	290.
		4.0	.20	3.7	4.0	.55	260.
		5.0	.20	3.7	5.0	.61	280.
		6.0	.20	3.7	6.0	.61	290.
		6.8	.20	3.7	7.0	.55	290.

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}\text{C}$ )	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
15/12/77	03h 30m				.0	.83	280.
					1.0	.61	300.
					2.0	.64	310.
					3.0	.64	340.
					4.0	.64	330.
					5.0	.56	340.
					6.0	.58	330.
	04h 00m				7.0	.60	330.
					.0	.67	290.
					1.0	.68	250.
					2.0	.61	240.
					3.0	.55	250.
					4.0	.49	250.
					5.0	.55	240.
	04h 30m				6.0	.55	240.
					.0	.50	300.
					1.0	.58	310.
					2.0	.53	300.
					3.0	.50	330.
					4.0	.47	310.
					5.0	.43	320.
	05h 00m				6.0	.46	320.
					7.0	.47	310.
					.0	.30	280.
					1.0	.34	260.
					2.0	.31	260.
					3.0	.31	260.
					4.0	.28	270.
	05h 30m				5.0	.29	270.
					6.0	.25	300.
					7.0	.24	270.
					8.0	.16	260.
					.0	.00	
					1.0	.06	290.

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}\text{C}$ )	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
15/12/77	05h 30m				2.0	.12	290.
					3.0	.14	280.
					4.0	.11	310.
					5.0	.09	250.
					6.0	.09	260.
					7.0	.11	280.
	06h 00m	.0	.20	3.6	.0	.22	110.
		1.0	.20	3.6	1.0	.26	120.
		2.0	.20	3.6	2.0	.27	110.
		3.0	.20	3.6	3.0	.24	110.
		4.0	.20	3.6	4.0	.25	120.
		5.0	.20	3.6	5.0	.28	120.
		6.0	.20	3.6	6.0	.28	120.
		7.0	.20	3.6	7.0	.24	110.
		7.8	.20	3.6	7.8	.21	110.
	06h 30m				.0	.49	130.
					1.0	.49	130.
					2.0	.30	120.
					4.0	.37	120.
					6.0	.37	100.
					8.0	.37	130.
	07h 00m	.0	.20	3.5	.0	.41	100.
		1.0	.20	3.5	2.0	.37	100.
		2.0	.20	3.5	4.0	.37	110.
		3.0	.30	3.5	6.0	.43	110.
		4.0	.40	3.5	8.0	.43	110.
		5.0	.50	3.5			
		6.0	.70	3.6			
		7.0	1.20	3.6			
		8.0	12.00	4.3			
		8.8	12.50	4.5			
	07h 45m	.0	.20	3.4	.0	.55	110.
		1.0	.20	3.4	2.0	.49	100.
		2.0	.30	3.4	4.0	.49	100.
		3.0	.40	3.4	6.0	.55	110.



DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
15/12/77	07h 45m	4.0	.50	3.4	7.0	.61	100.
		5.0	1.80	3.7	8.0	.61	100.
		6.0	8.00	4.5			
		7.0	18.80	5.8			
		8.0	21.50	6.3			
		9.0	21.50	6.4			
		9.5	21.50	6.4			
		.0	.50	3.3			
		1.0	.50	3.3			
	08h 00m	2.0	.50	3.3			
		3.0	.50	3.3			
		4.0	.50	3.3			
		5.0	1.50	3.4			
		6.0	8.00	4.2			
		7.0	20.60	6.1			
		8.0	22.70	6.5			
		9.0	22.60	6.5			
		9.7	22.80	6.6			
	08h 30m	.0	.70	3.4	.0	.56	110.
		1.0	1.00	3.4	1.0	.55	110.
		2.0	1.30	3.4	2.0	.55	110.
		3.0	1.50	3.5	4.0	.39	130.
		4.0	1.70	3.5	6.0	.55	120.
		5.0	3.00	3.6	7.0	.61	130.
		6.0	8.00	4.1	8.0	.55	130.
		7.0	24.00	6.1	10.0	.49	130.
		8.0	24.00	6.4			
		9.0	24.00	6.5			
		10.0	24.00	6.5			
	09h 00m	.0	1.20	3.5	.0	.43	110.
		1.0	1.40	3.5	2.0	.43	110.
		2.0	1.70	3.5	4.0	.49	130.
		3.0	2.60	3.6	6.0	.49	130.
		4.0	3.20	3.7	7.0	.55	130.
		5.0	6.00	4.0			
		6.0	17.80	5.0			

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
15/12/77	09h 00m	7.0	23.00	6.3			
		8.0	23.30	6.4			
		9.0	23.30	6.5			
		10.0	23.30	6.5			
	09h 30m	.0	.50	3.5	.0	.34	110.
		1.0	1.30	3.5	2.0	.44	110.
		2.0	2.30	3.6	4.0	.55	120.
		3.0	3.20	3.7	6.0	.55	100.
		4.0	4.50	3.9	7.0	.49	100.
		5.0	12.00	4.6	8.0	.49	100.
		6.0	20.00	5.8	10.0	.37	100.
		7.0	23.30	6.2			
		8.0	23.30	6.3			
		9.0	23.30	6.3			
	10h 05m	10.0	23.30	6.3			
		10.3	23.30	6.3			
		.0	1.00	3.7	.0	.24	90.
		1.0	3.60	3.9	2.0	.34	160.
		2.0	3.60	3.9	4.0	.37	110.
		3.0	4.00	4.0	6.0	.49	110.
		4.0	11.60	4.6	8.0	.43	120.
		5.0	19.20	5.8	9.0	.43	120.
		6.0	20.80	6.0	10.0	.18	110.
		7.0	22.00	6.1			
	10h 30m	8.0	22.50	6.2			
		9.0	23.50	6.3			
		10.0	27.00	7.0			
		.0	1.60	3.8	.0	.00	
		1.0	2.70	4.0	1.0	.00	
		2.0	6.00	4.7	2.0	.18	100.
		3.0	13.40	5.1	3.0	.19	80.
		4.0	14.00	5.3	4.0	.43	90.
		5.0	20.50	6.0	6.0	.43	100.
		6.0	22.00	6.0	8.0	.43	100.
		7.0	22.20	6.2	9.0	.43	110.
		8.0	22.70	6.4	10.0	.12	340.

DATE	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
15/12/77	10h 30m	9.0	27.50	7.0			
		10.0	27.60	7.1			
		10.9	28.40	7.1			
	11h 00m	.0	1.50	3.7	.0	.03	300.
		1.0	1.90	3.7	2.0	.03	10.
		2.0	13.70	4.0	3.0	.30	30.
		3.0	17.70	5.5	4.0	.39	80.
		4.0	20.00	5.8	6.0	.43	100.
		5.0	21.80	6.1	8.0	.44	120.
		6.0	22.20	6.1	9.0	.39	120.
		7.0	22.80	6.2	10.3	.24	100.
		8.0	23.00	6.2			
		9.0	24.50	6.3			
		10.0	27.60	6.6			
		10.3	27.60	7.0			
	11h 35m	.0	1.50	4.0	.0	.43	260.
		1.0	6.10	4.2	2.0	.03	320.
		2.0	15.40	4.9	4.0	.09	40.
		3.0	17.20	5.6	6.0	.24	80.
		4.0	18.40	5.7	8.0	.31	140.
		5.0	19.00	5.8	10.0	.14	140.
		6.0	20.50	5.9			
	12h 00m	7.0	23.00	6.1			
		8.0	23.50	6.2			
		9.0	23.80	6.2			
		10.0	28.80	6.7			
		10.2	28.80	7.1			
		.0	2.00	3.8	.0	.71	280.
		1.0	2.80	3.8	1.0	.58	260.
		2.0	6.80	4.0	2.0	.28	260.
		3.0	19.00	5.5	3.0	.00	
		4.0	19.40	5.8	4.0	.00	
		5.0	19.40	5.8	5.0	.00	
		6.0	22.00	5.9	6.0	.16	70.
		7.0	24.00	6.2	7.0	.13	140.
		8.0	24.20	6.3	8.0	.14	150.

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
15/12/77	12h 00m	9.0	27.50	7.0	9.0	.18	110.
		10.0	29.00	7.2	10.0	.09	110.
	12h 35m	.0	2.80	3.9	.0	.68	250.
		1.0	4.90	4.0	1.0	.67	250.
		2.0	6.20	4.1	2.0	.43	270.
		3.0	17.50	5.4	4.0	.25	290.
		4.0	20.80	5.7	6.0	.18	250.
		5.0	22.30	6.0	7.0	.07	290.
		6.0	23.50	6.2	8.0	.06	330.
		7.0	24.20	6.3	10.0	.00	
		8.0	27.80	6.7			
		9.0	28.50	7.0			
		10.0	28.60	7.1			
		10.2	28.60	7.1			
	13h 00m	.0	1.30	3.8	.0	.61	260.
		1.0	2.00	3.8	1.0	.67	260.
		2.0	3.30	3.7	2.0	.55	260.
		3.0	16.50	4.8	4.0	.49	270.
		4.0	20.50	5.9	6.0	.37	260.
		5.0	23.80	6.2	8.0	.25	270.
		6.0	27.70	6.9	9.0	.10	260.
		7.0	27.80	7.0			
		8.0	28.10	7.1			
		9.0	27.80	7.1			
		9.7	27.80	7.1			
	13h 30m	.0	.50	3.6	.0	.82	290.
		1.0	1.30	3.6	1.0	.62	240.
		2.0	3.00	3.7	2.0	.61	250.
		3.0	5.00	3.9	3.0	.61	320.
		4.0	8.20	4.3	5.0	.47	310.
		5.0	22.20	5.6	6.0	.44	300.
		6.0	24.70	6.2	7.0	.30	10.
		7.0	26.30	6.5	8.0	.20	280.
		8.0	27.30	6.7	9.0	.00	
		9.0	27.30	6.9			
		9.2	27.30	6.9			



DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{\text{oo}}$ )	TEMP ( $^{\circ}\text{C}$ )	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
15/12/77	14h 00m	.0	1.80	3.7	.0	1.19	290.
		1.0	2.40	3.8	2.0	.62	300.
		2.0	3.10	3.8	3.0	.55	300.
		3.0	4.50	3.9	5.0	.43	280.
		4.0	11.10	4.5	6.0	.25	290.
		5.0	15.30	5.1	8.0	.06	110.
		6.0	20.70	6.1	8.8	.40	160.
		7.0	23.60	6.5			
	14h 00m	8.0	27.80	7.0			
		8.8	27.80	7.0			
		.0	1.50	3.7			
		1.0	2.40	3.7			
		2.0	3.40	3.8			
		3.0	6.00	4.0			
		4.0	11.50	4.6			
		5.0	16.00	5.2			
	14h 35m	6.0	23.20	6.1			
		7.0	24.80	6.4			
		7.7	27.60	6.9			
		.0	.80	3.7	.0	1.62	290.
		1.0	1.20	3.6	3.0	.58	300.
		2.0	1.80	3.7	6.0	.43	280.
		3.0	3.40	3.7	7.0	.06	240.
		4.0	6.60	4.1	9.0	.31	180.
	14h 35m	5.0	12.50	4.8			
		6.0	19.50	5.8			
		7.0	20.50	6.0			
		8.0	26.40	6.9			
		9.0	27.50	7.0			
		9.2	27.50	7.0			
		.0	.60	3.7			
		1.0	.90	3.7			
		2.0	2.00	3.7			
		3.0	3.00	4.0			
		4.0	6.20	4.0			

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
15/12/77	14h 35m	5.0	12.60	4.7			
		6.0	19.50	5.8			
		7.0	20.80	6.0			
		8.0	27.60	7.0			
	15h 00m	8.0	28.20	7.0			
		.0	1.00	3.7	.0	1.49	290.
		1.0	1.30	3.7	2.0	.62	290.
		2.0	2.50	3.8	4.0	.62	290.
		3.0	3.90	3.9	5.0	.49	280.
		4.0	6.10	4.1	6.0	.17	340.
		5.0	10.80	4.5	7.0	.14	310.
		6.0	17.00	5.4	8.0	.27	360.
		7.0	20.80	5.9	8.6	.33	120.
		8.0	26.40	6.7			
		8.6	28.00	7.0			
	15h 30m	.0	1.40	3.8	.0	1.01	290.
		1.0	2.30	3.8	1.0	.65	280.
		2.0	2.60	3.8	2.0	.65	280.
		3.0	3.70	3.9	4.0	.43	270.
		4.0	6.30	4.2	6.0	.12	70.
		5.0	9.70	4.5	8.0	.25	90.
	16h 00m	6.0	16.50	5.3			
		6.3	20.10	5.7			
		.0	1.80	3.8	.0	1.49	280.
		1.0	2.50	3.9	2.0	.55	300.
		2.0	3.40	3.9	4.0	.55	300.
		3.0	4.80	4.1	6.0	.00	
		4.0	5.80	4.2	8.0	.09	340.
		5.0	7.60	4.4			
	16h 30m	6.0	13.80	4.9			
		7.0	20.70	6.2			
		8.0	26.80	6.8			
		.0	1.50	3.8	.0	.76	160.
		1.0	2.70	3.8	1.0	.61	260.
		2.0	3.20	3.9	2.0	.61	270.

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
15/12/77	16h 30m	3.0	4.30	4.1	3.0	.61	290.
		4.0	5.00	4.2	4.0	.61	300.
		5.0	7.00	4.4	5.0	.43	300.
					6.0	.14	340.
					7.0	.11	130.
	17h 00m				8.0	.09	130.
					9.0	.09	120.
		.0	.00	3.9			
		1.0	.00	3.9			
		2.0	.20	3.9			
		3.0	1.20	4.0			
		4.0	1.90	4.1			
		5.0	2.40	4.1			
		6.0	5.40	4.3			
		7.0	13.50	5.2			
		8.0	17.20	5.9			
		8.5	19.80	6.0			
16/12/77	23h 40m	.0	.00	4.6			
		1.0	.00	4.6			
		2.0	.00	4.6			
		3.0	.00	4.5			
		4.0	.00	4.6			
	00h 00m	5.0	.00	4.8			
		6.0	3.20	5.2			
		7.0	14.50	6.5			
		8.0	26.20	7.6			
		8.7	26.20	7.6			
		.0	.00	4.6	3.0	.61	280.
		1.0	.00	4.6			
		2.0	.00	4.6			
		3.0	.00	4.7			
		4.0	.00	4.7			
		5.0	2.00	4.8			
		6.0	7.50	5.1			
		7.0	26.40	6.2			
		8.0	29.70	7.6			
		8.6	29.70	7.6			

DATE	TIME (PST)	DEPTH (m)	SALINITY (‰)	TEMP (°C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)	
16/12/77	00h 30m	.0	.00	4.5	3.0	.61	290.	
		1.0	.00	4.5				
		2.0	.00	4.5				
		3.0	.00	4.5				
		4.0	.00	4.5				
		5.0	2.50	4.5				
		6.0	5.30	5.6				
		7.0	14.00	7.3				
	01h 00m	8.0	26.00	7.5				
		.0	.00					
		1.0	.00					
		2.0	.00					
		3.0	.50					
		4.0	.80					
		5.0	1.50					
		6.0	2.70					
	02h 00m	7.0	7.20					
		7.7	23.40					
		.0	.00			1.0	.68	260.
		1.0	.00			2.0	.61	290.
		2.0	.00			4.0	.61	330.
		3.0	.00			6.0	.61	330.
		4.0	.00			7.0	.33	340.
		5.0	.00					
	02h 30m	6.0	.40					
		7.0	3.10					
		.0	.00			1.0	.61	280.
		1.0	.00			2.0	.61	280.
		2.0	.00			4.0	.67	330.
		3.0	.00			6.0	.61	320.
4.0		.00			7.0	.61	310.	
5.0		.00						
6.0	.00							
7.0	.00							



DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
16/12/77	03h 00m	.0	.00		1.0	.61	270.
		1.0	.00		2.0	.61	290.
		2.0	.00		4.0	.61	280.
		3.0	.00		6.0	.61	300.
		4.0	.00		7.0	.73	290.
		5.0	.00				
		6.0	.00				
	08h 00m	7.0	.00				
		.0	.00	4.4	1.0	.44	110.
		1.0	.00	4.4	4.0	.43	110.
		2.0	.00	4.4	6.0	.43	110.
		3.0	.00	4.4	8.0	.55	120.
		4.0	.00	4.4	8.8	.12	110.
		5.0	.00	4.4			
	08h 40m	6.0	.00	4.4			
		7.0	.00	4.8			
		8.0	11.80	6.0			
		8.8	12.40	6.2			
		.0	.00	4.2	.0	.61	110.
		1.0	.00	4.3	2.0	.50	90.
		2.0	.00	4.3	4.0	.49	90.
		3.0	.00	4.3	6.0	.55	110.
		4.0	.00	4.3	7.0	.61	110.
		5.0	.00	4.6	8.0	.58	110.
		6.0	9.50	5.5	9.0	.37	100.
		7.0	14.50	6.3			
		8.0	18.40	6.6			
		9.0	18.80	6.7			
	10h 55m	.0	.00	4.4	.0	.11	90.
		1.0	.50	4.4	1.0	.24	120.
		2.0	1.00	4.6	2.0	.24	110.
		3.0	2.50	4.8	3.0	.27	90.
		4.0	3.80	5.0	4.0	.19	90.
		5.0	7.30	5.3	5.0	.37	90.
		6.0	16.80	6.7	6.0	.43	90.

DATE	TIME (PST)	DEPTH (m)	SALINITY ( $^{\circ}/_{00}$ )	TEMP ( $^{\circ}$ C)	DEPTH (m)	SPEED (m/s)	DIRECTION (True)
16/12/77	10h 55m	7.0	22.70	6.7	7.0	.46	110.
		8.0	22.70	6.7	8.0	.49	110.
		9.0	22.70	6.7	9.0	.49	110.
		9.6	22.70	6.7	9.6	.37	100.
16/12/77	11h 20m	.0	.00		.0	.14	210.
		1.0	.00		1.0	.14	130.
		2.0	1.30		2.0	.12	70.
		3.0	2.00		3.0	.18	50.
		4.0	4.00		4.0	.25	80.
		5.0	17.80		5.0	.43	90.
		6.0	21.40		6.0	.43	110.
		7.0	22.10		7.0	.49	120.
		8.0	22.20		8.0	.43	110.
		9.0	22.50		9.0	.30	110.
		9.4	25.60		9.4	.24	110.

Figure 50

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

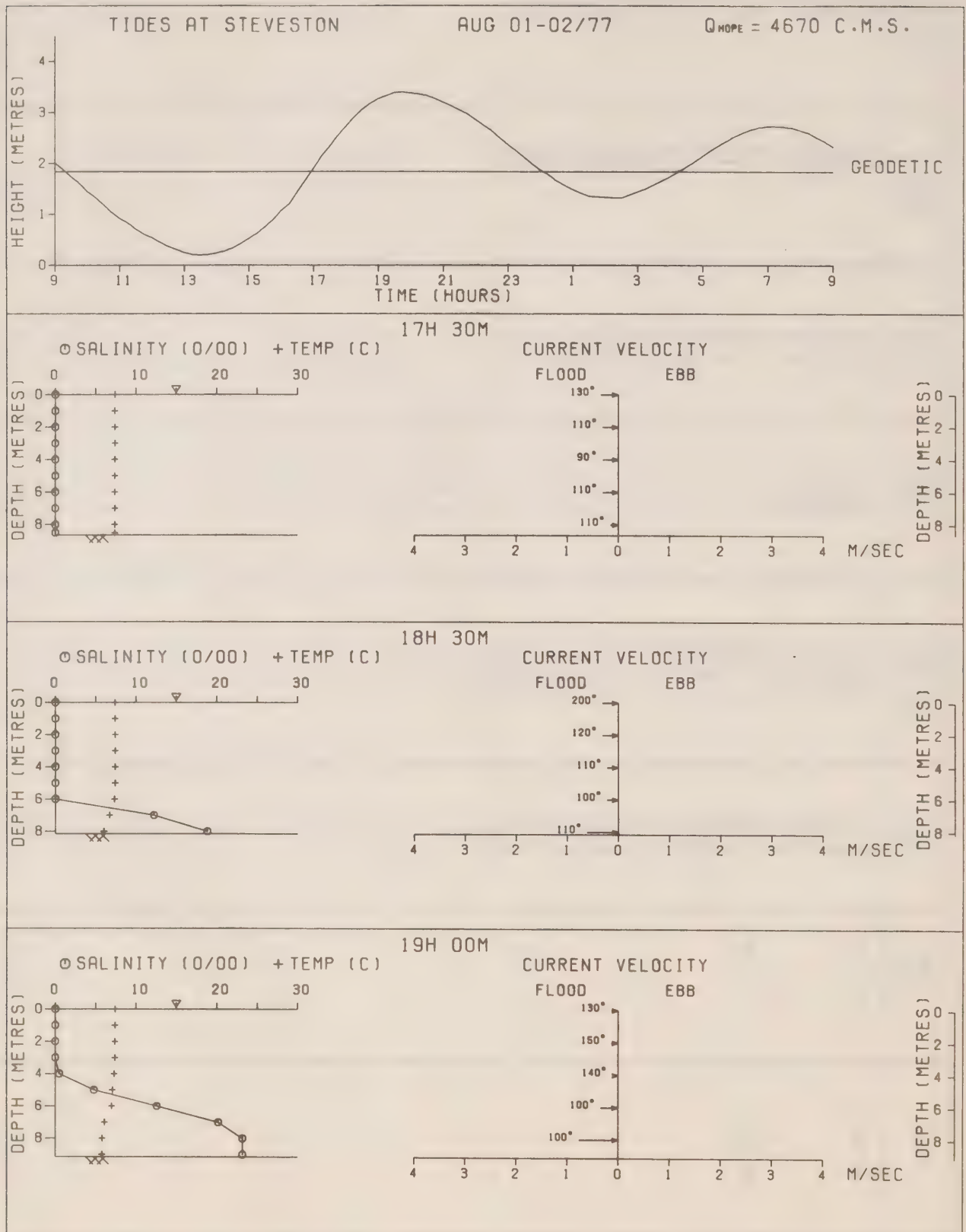


Figure 51

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

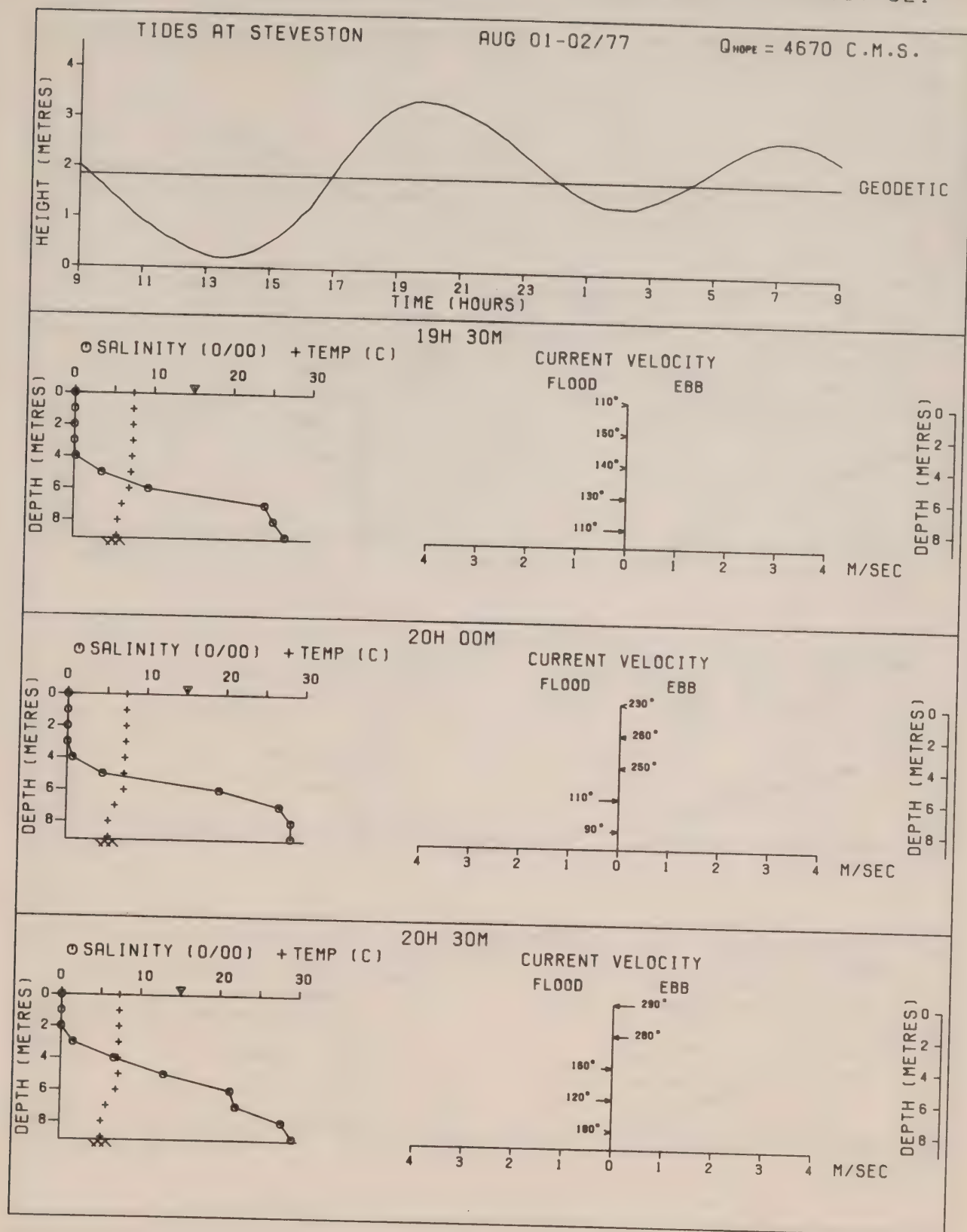




Figure 52

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

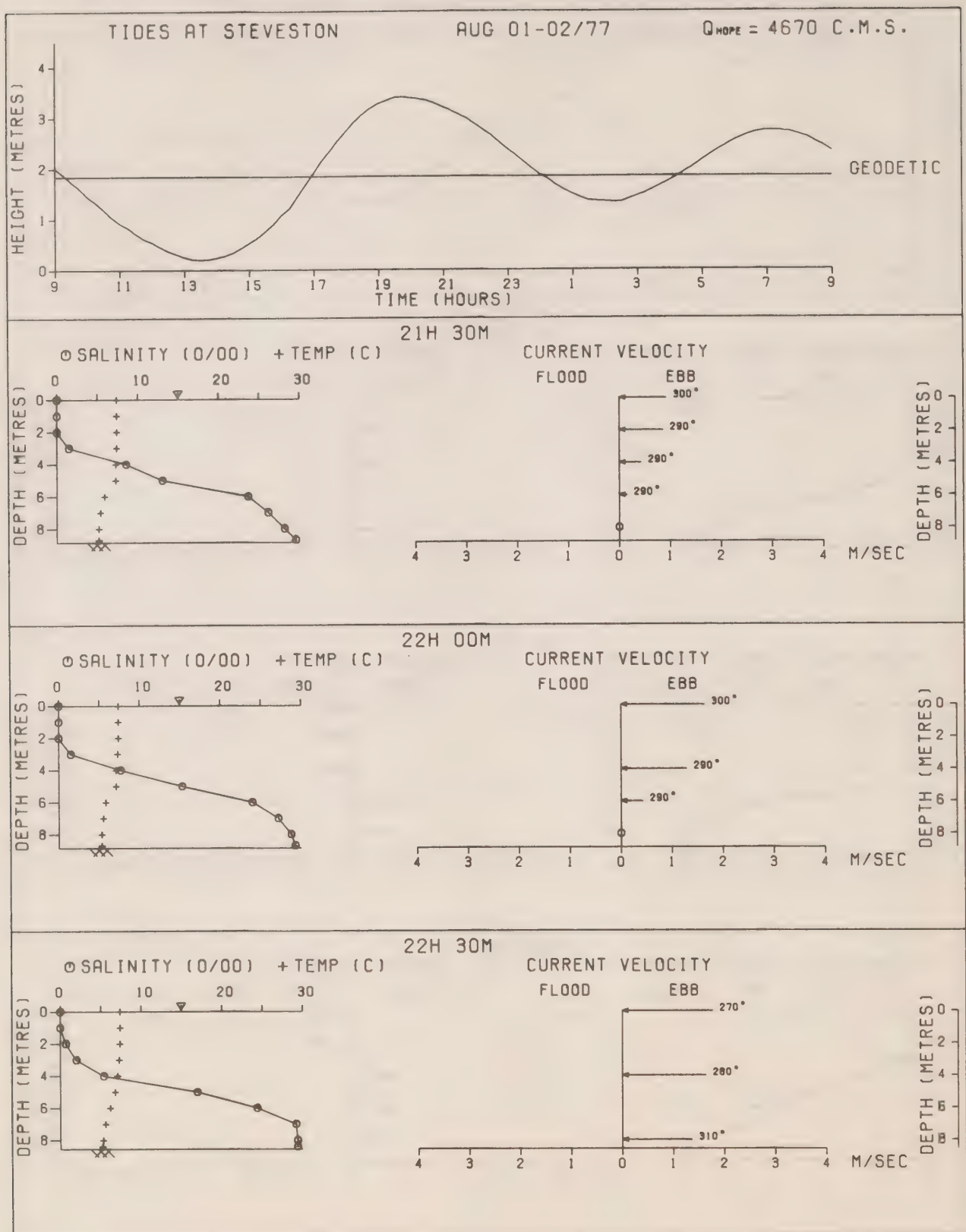


Figure 53

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

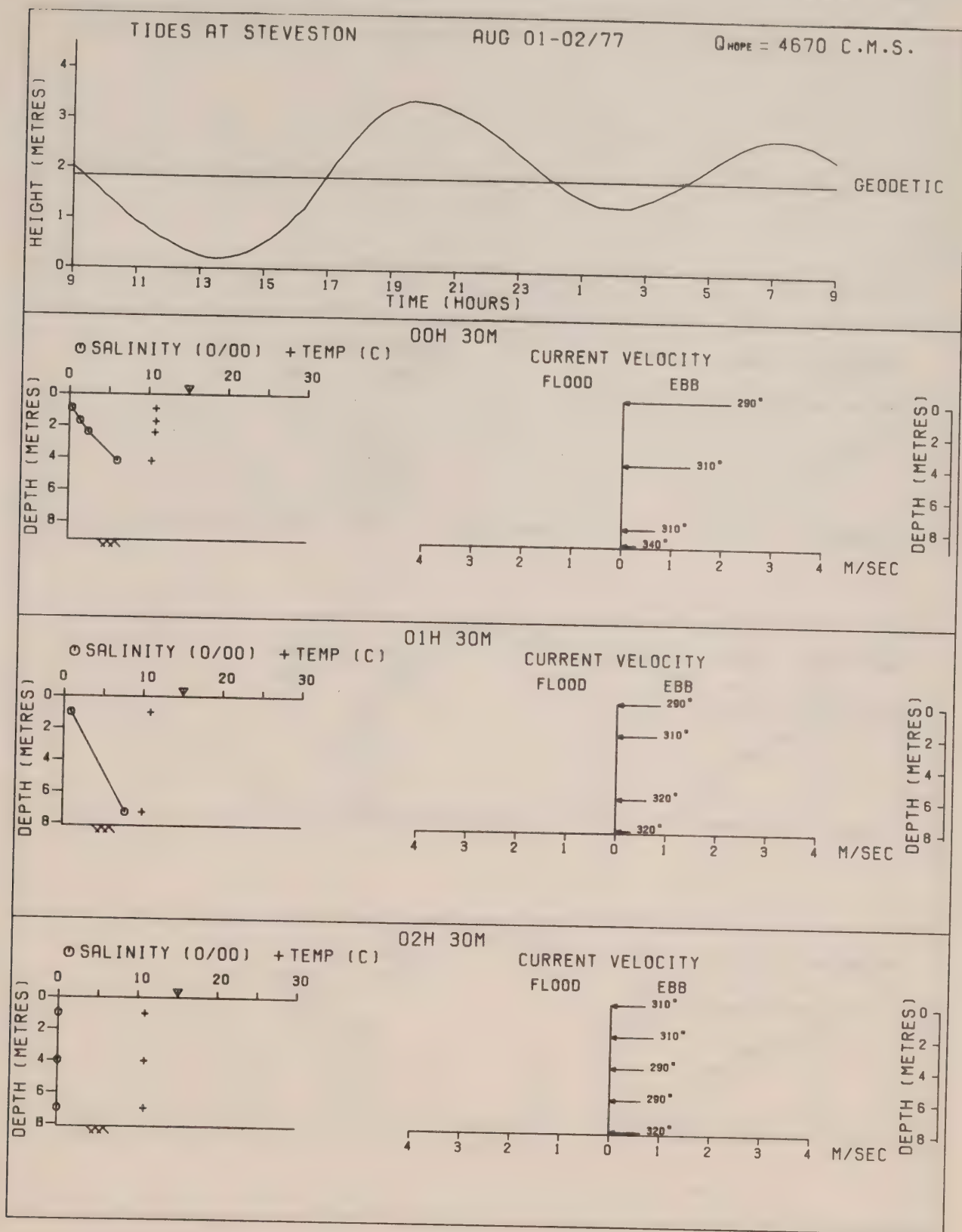


Figure 54

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

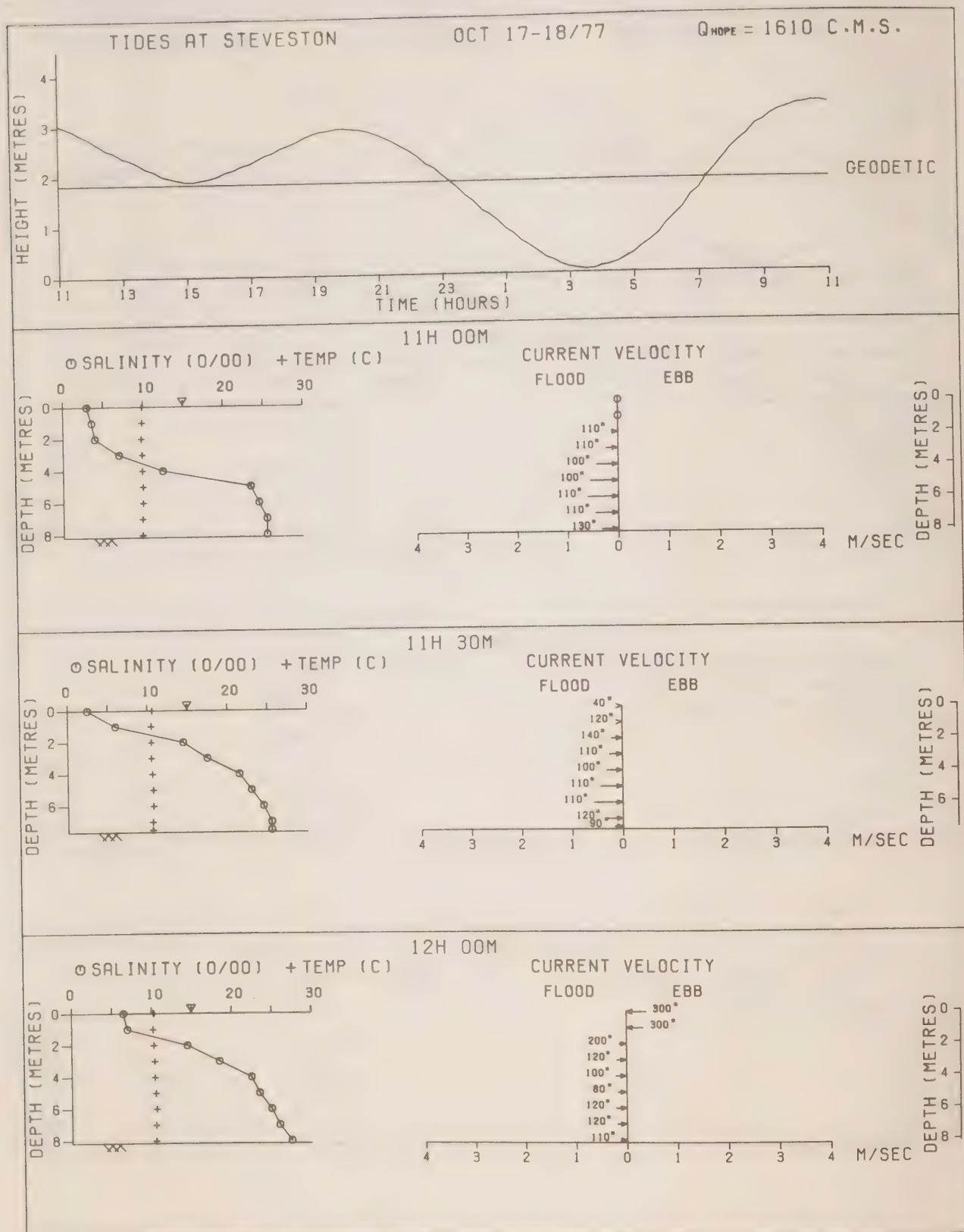


Figure 55

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

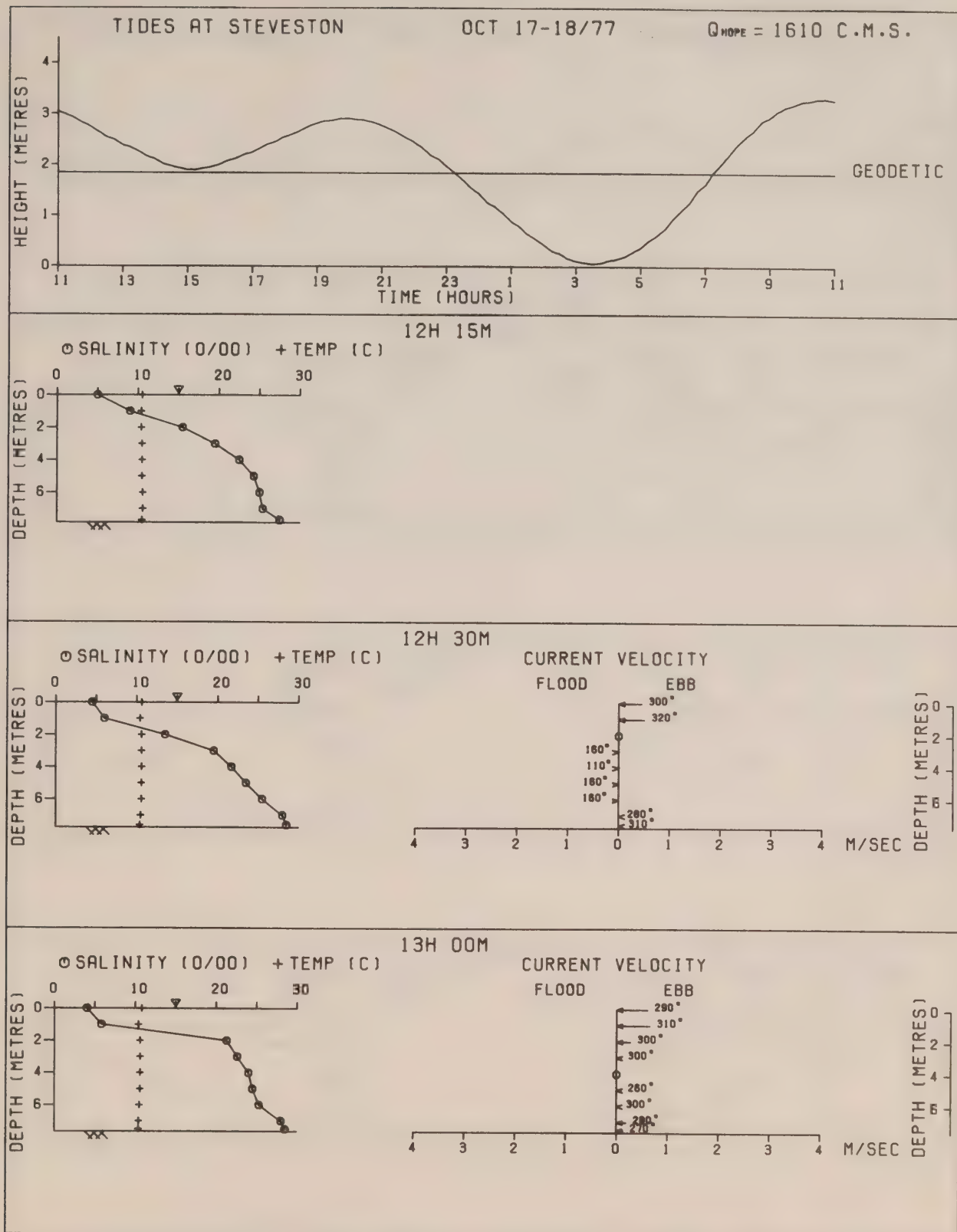
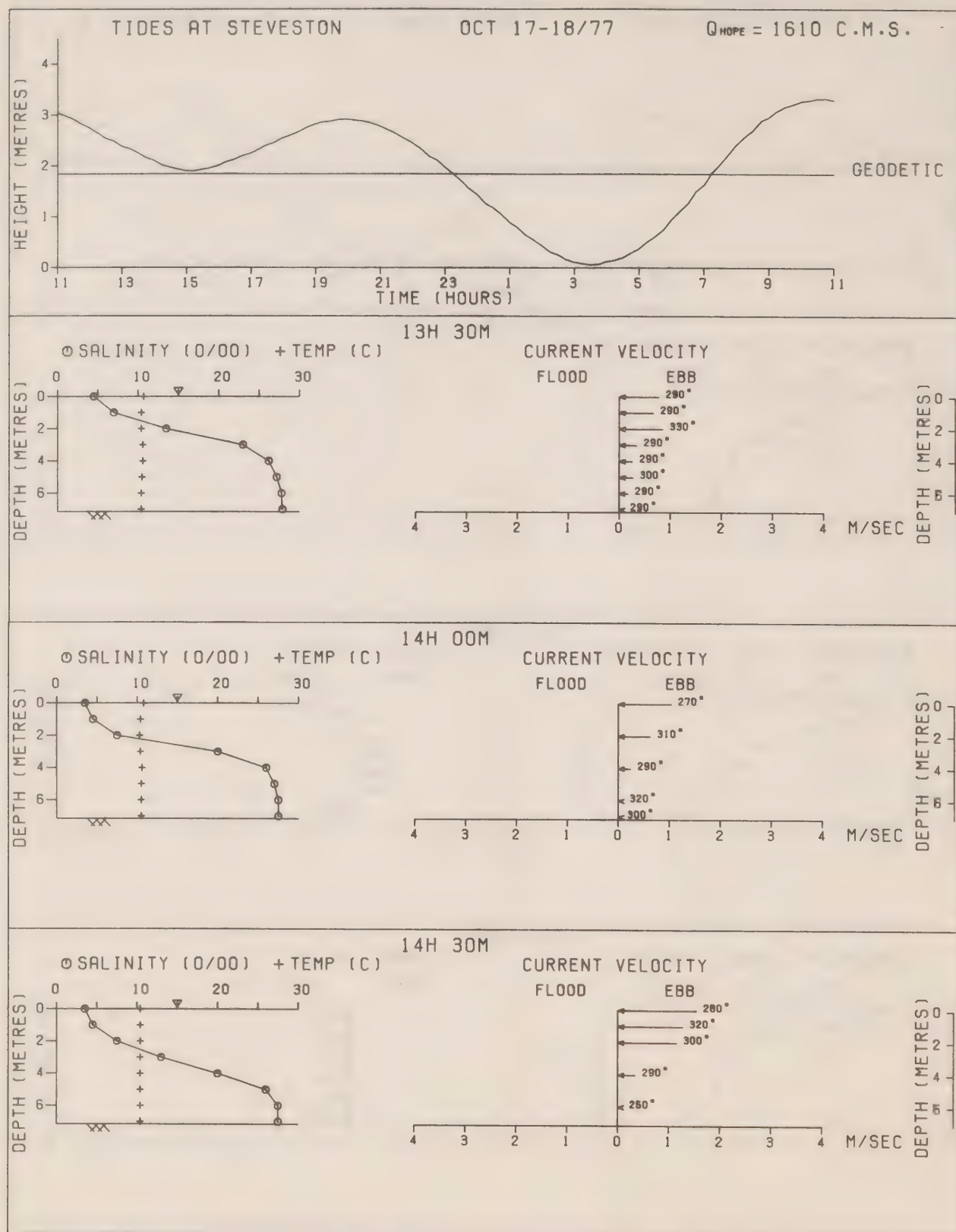




Figure 56

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21



**Figure 57**

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

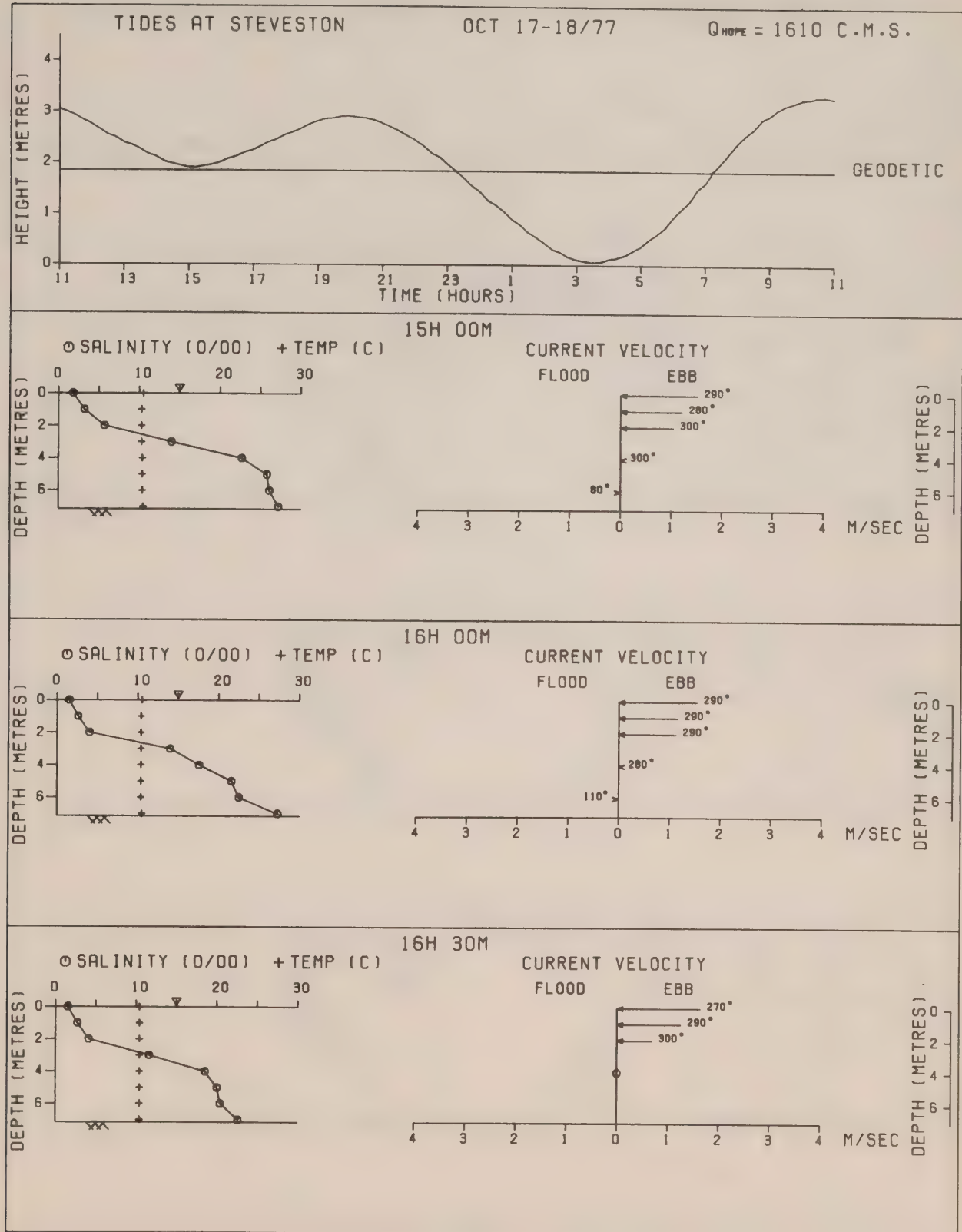


Figure 58

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

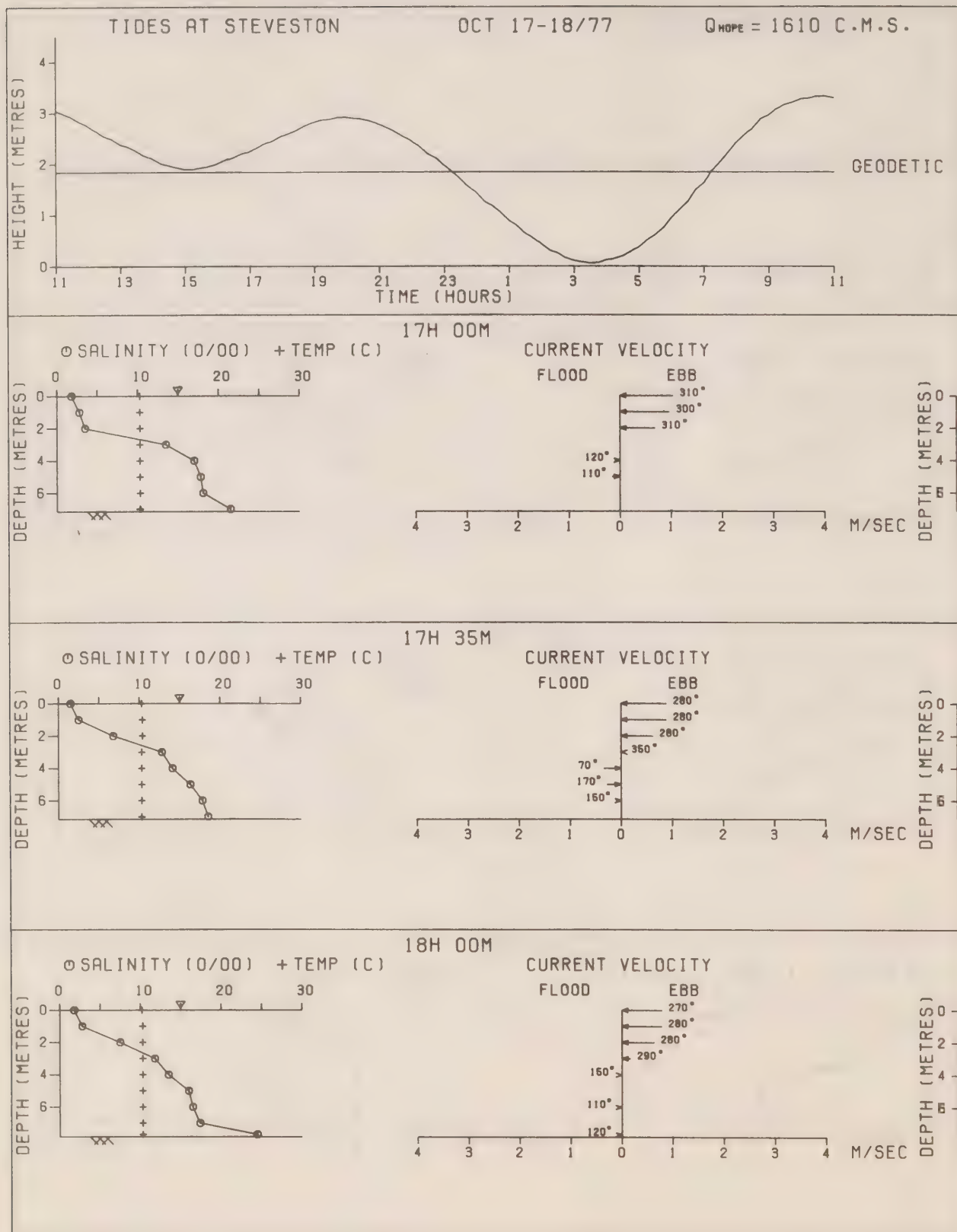


Figure 59

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

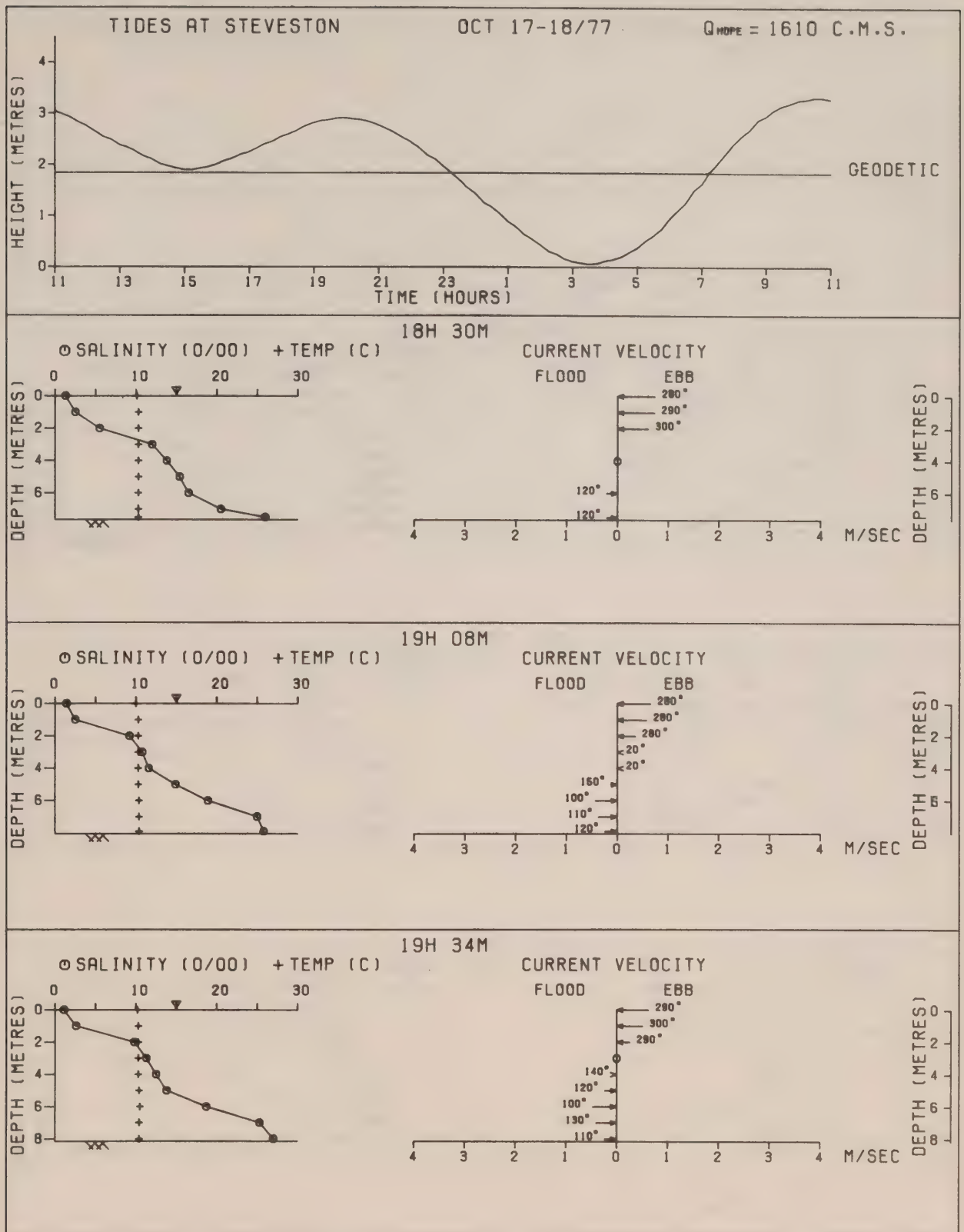




Figure 60

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

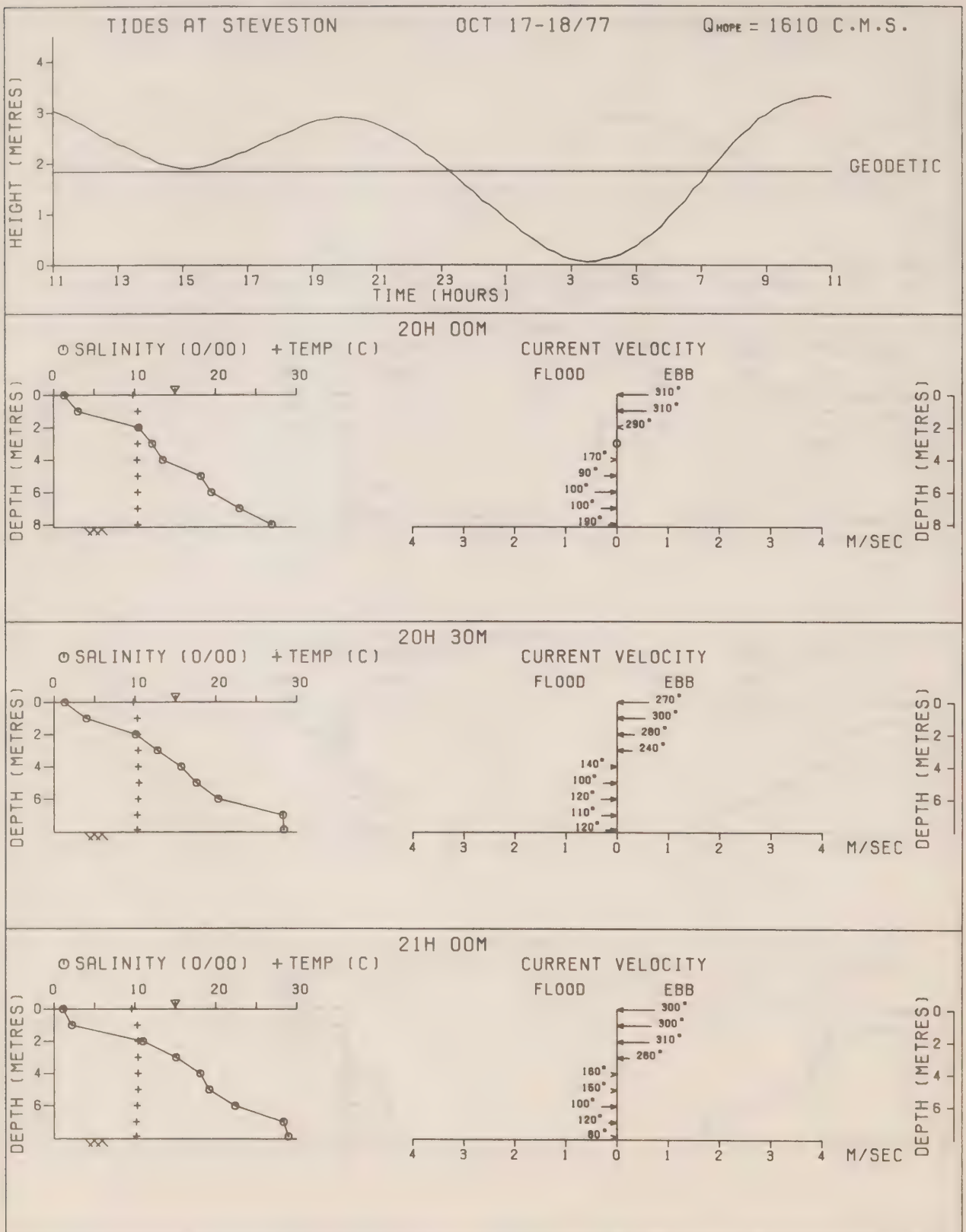


Figure 61

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

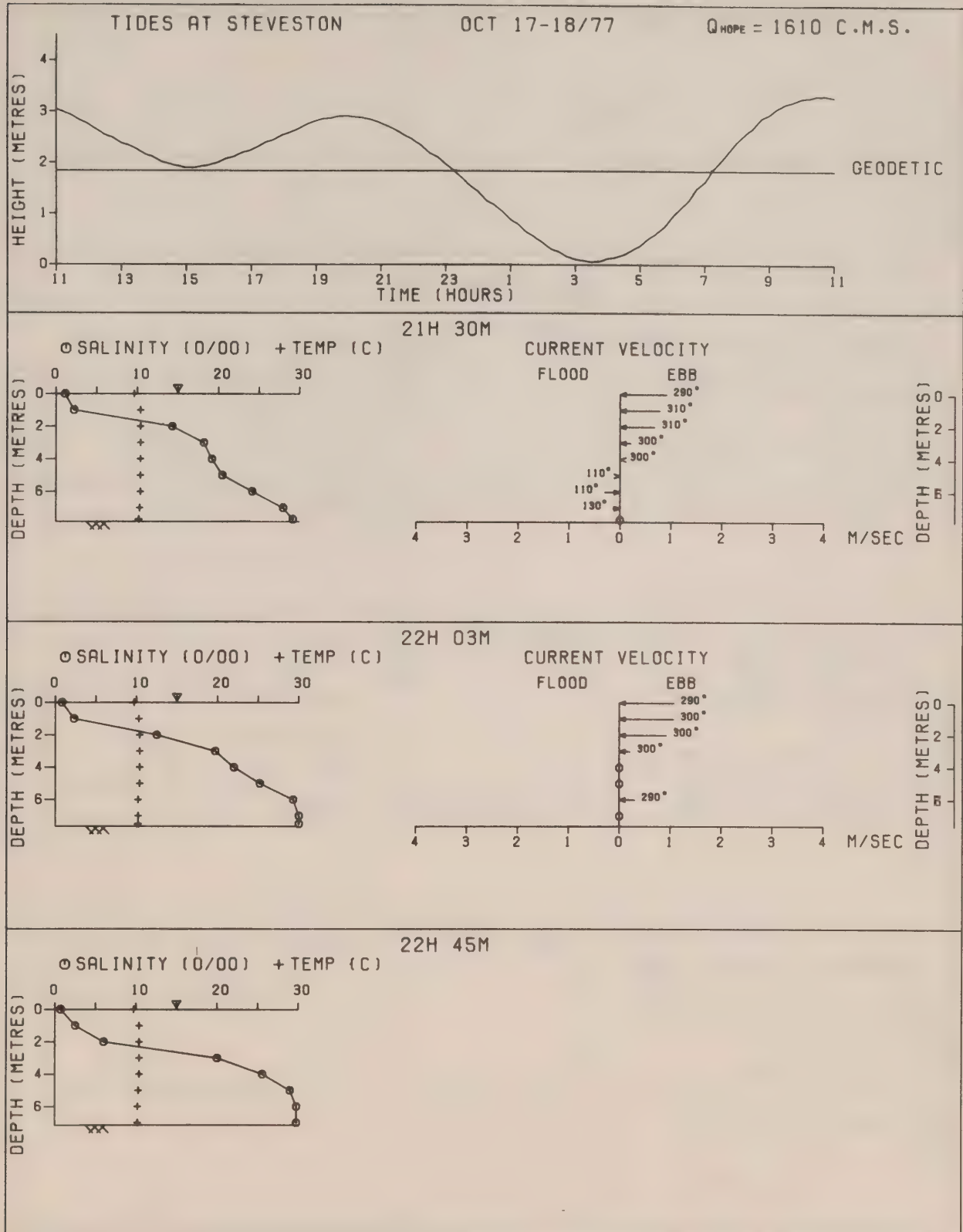


Figure 62

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

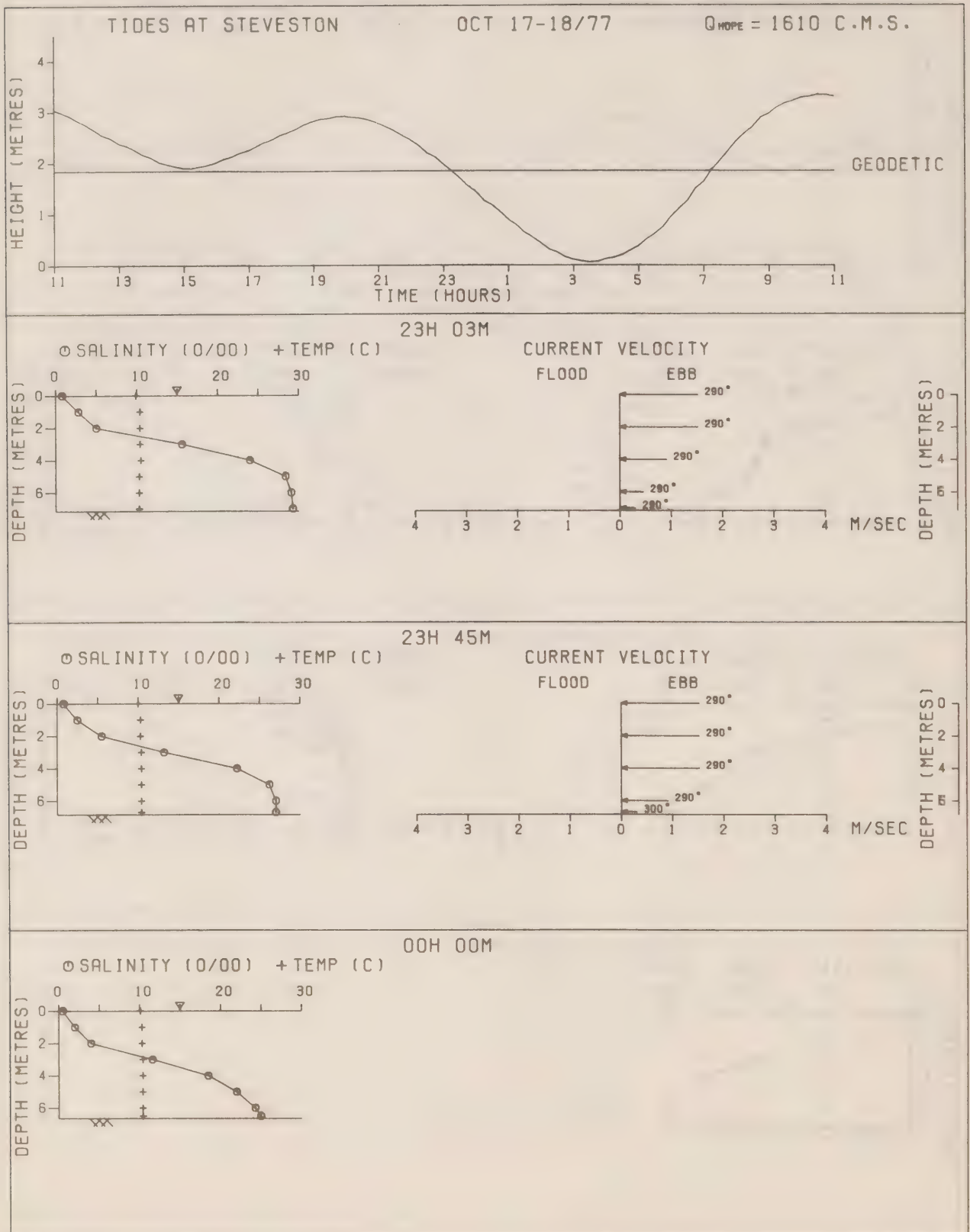


Figure 63

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

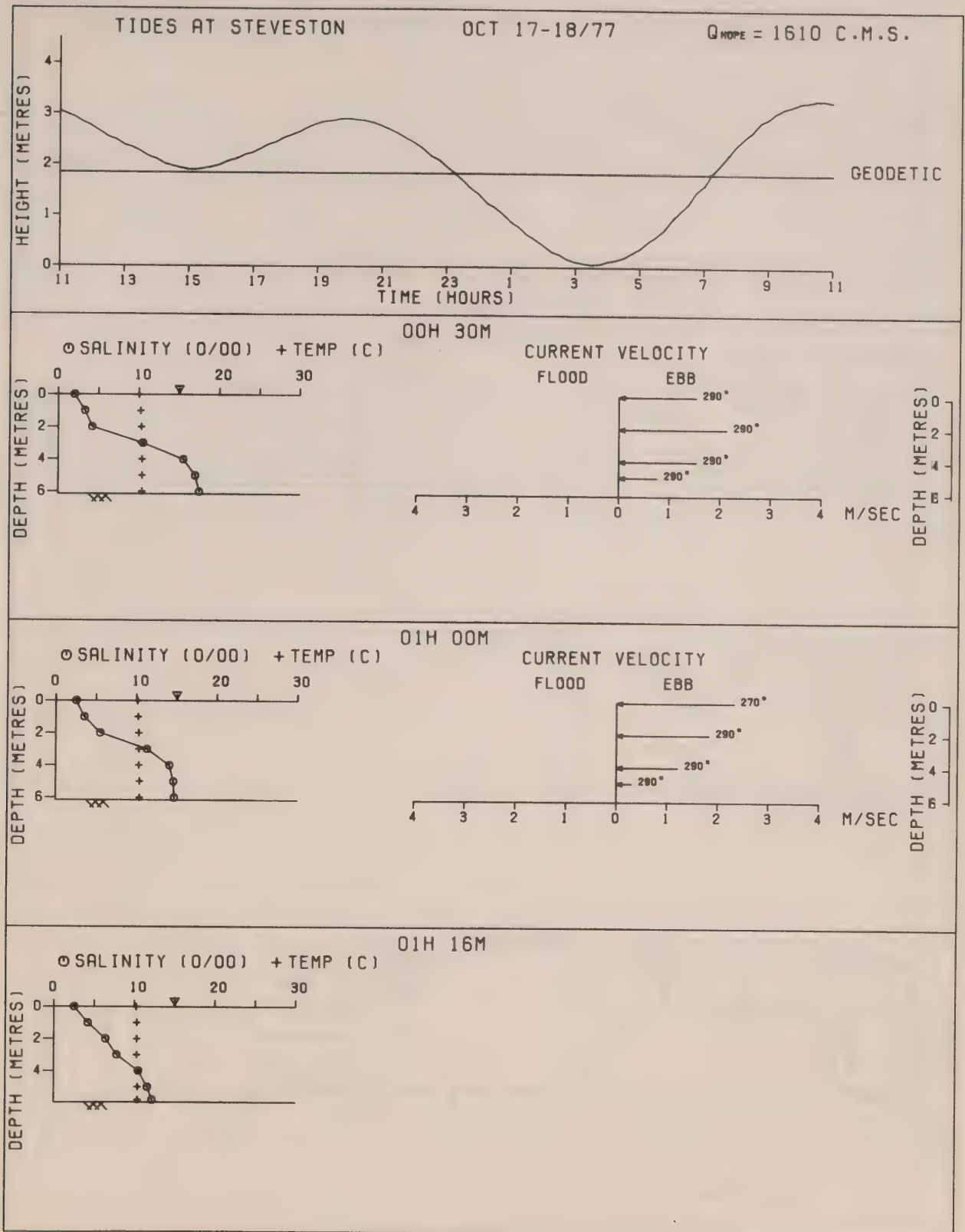
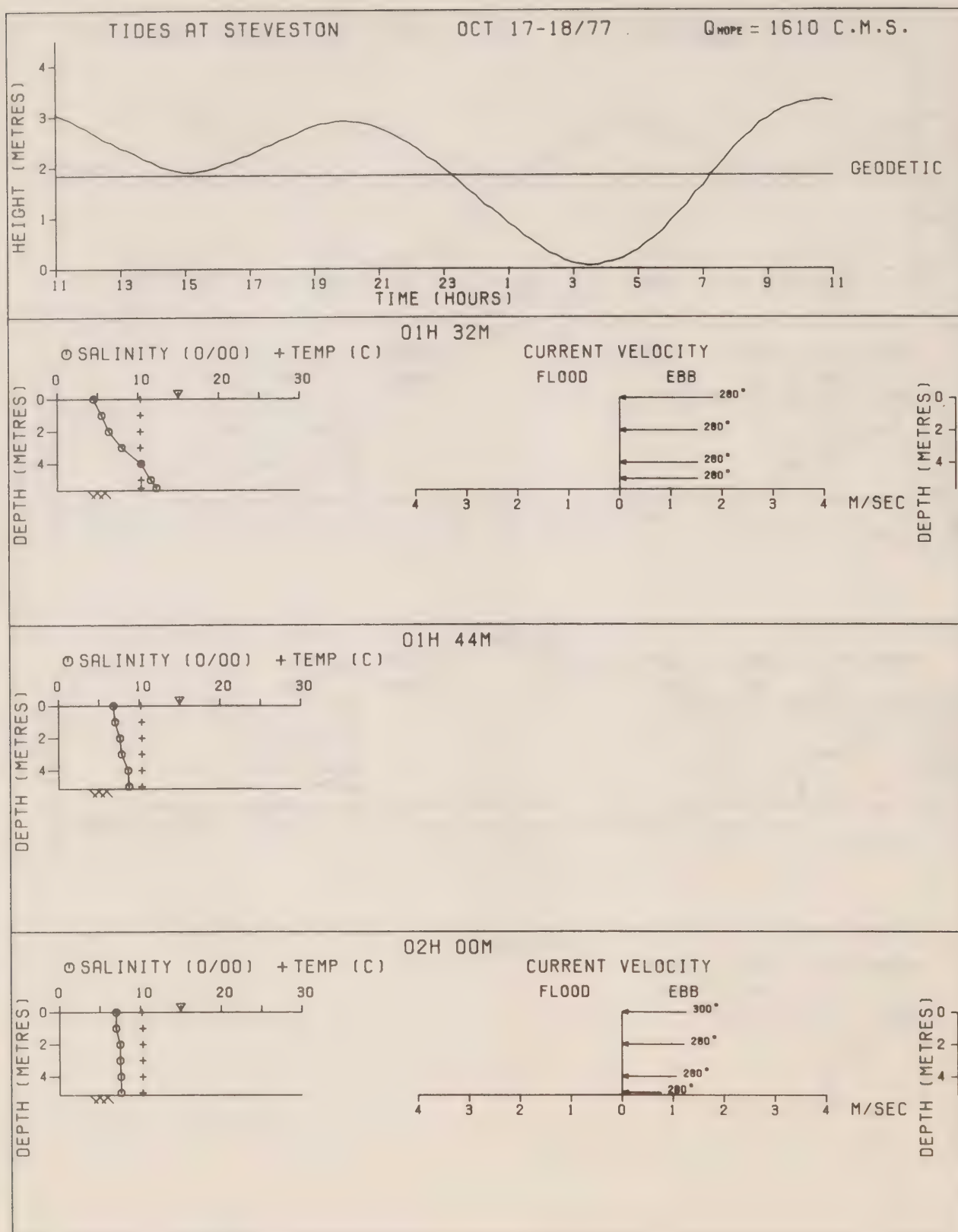




Figure 64

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21



**Figure 65**

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

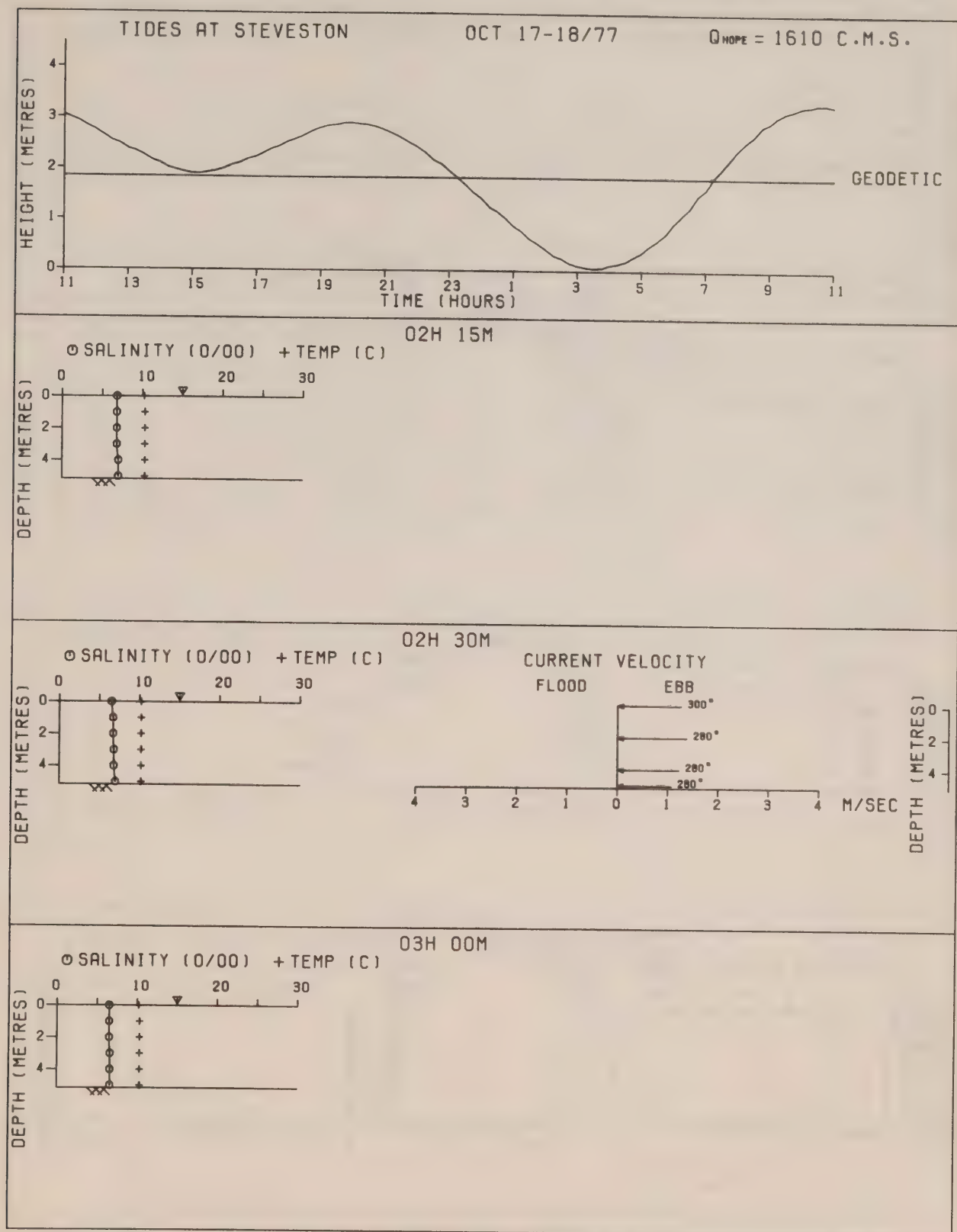


Figure 66

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

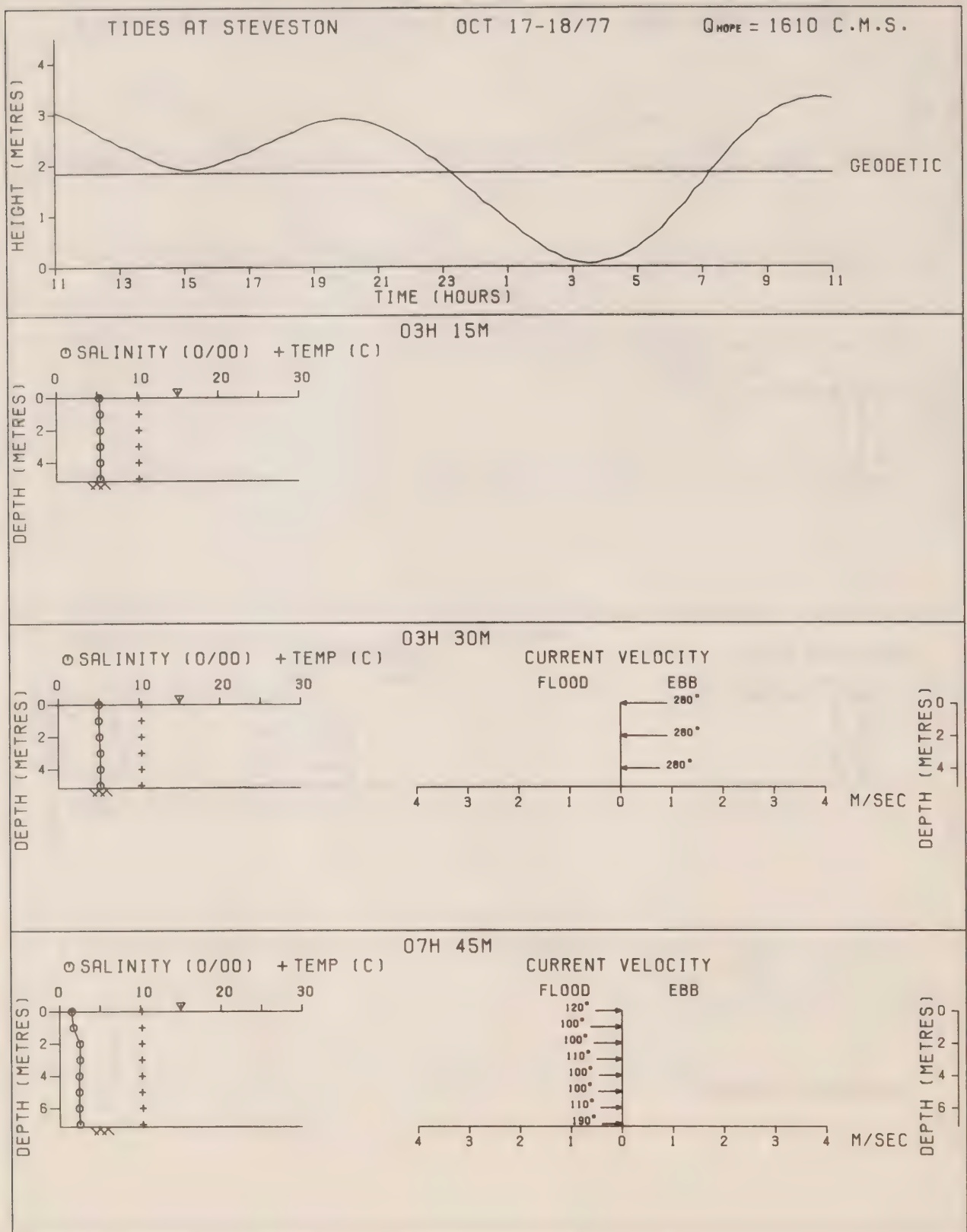


Figure 67

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

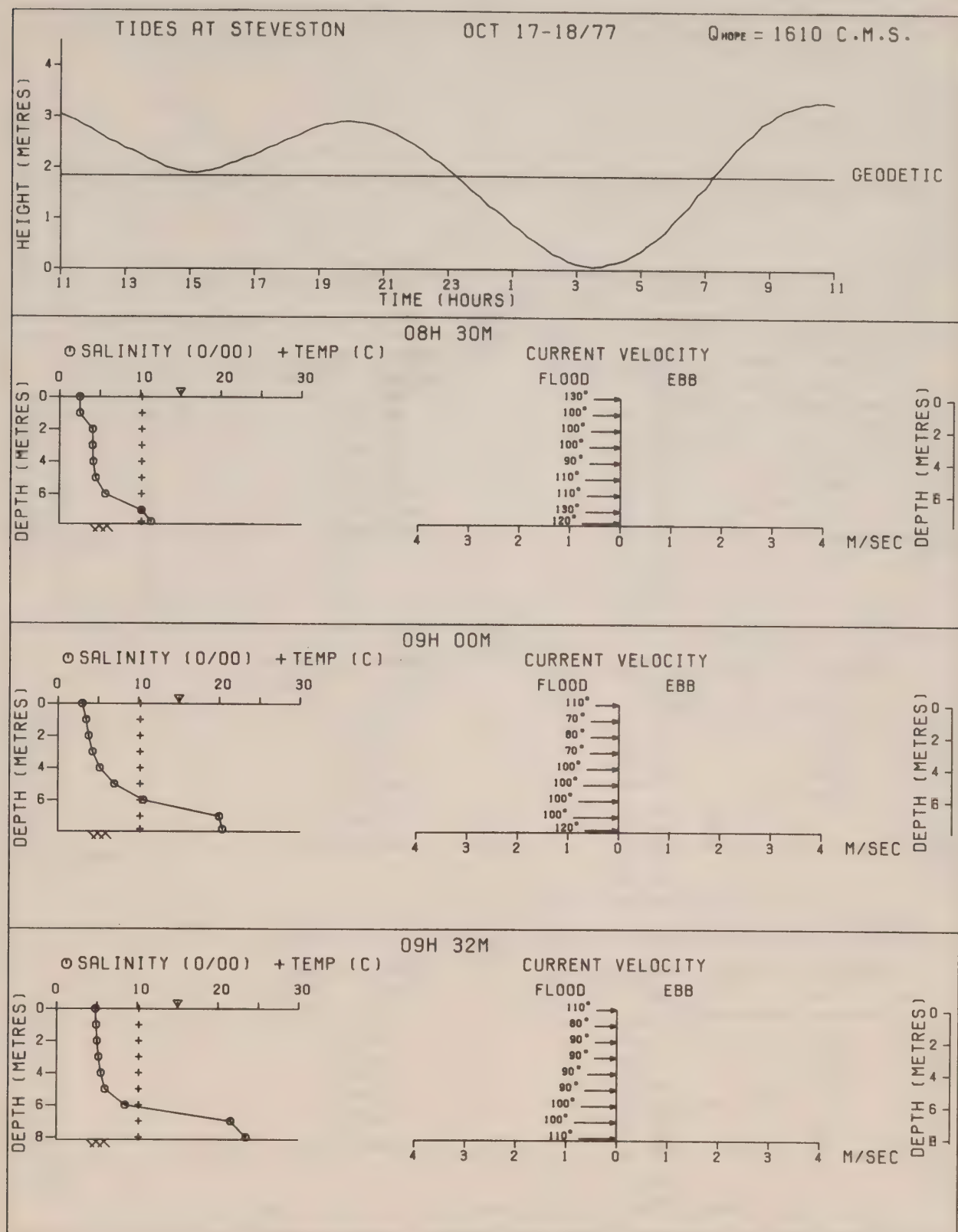




Figure 68

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

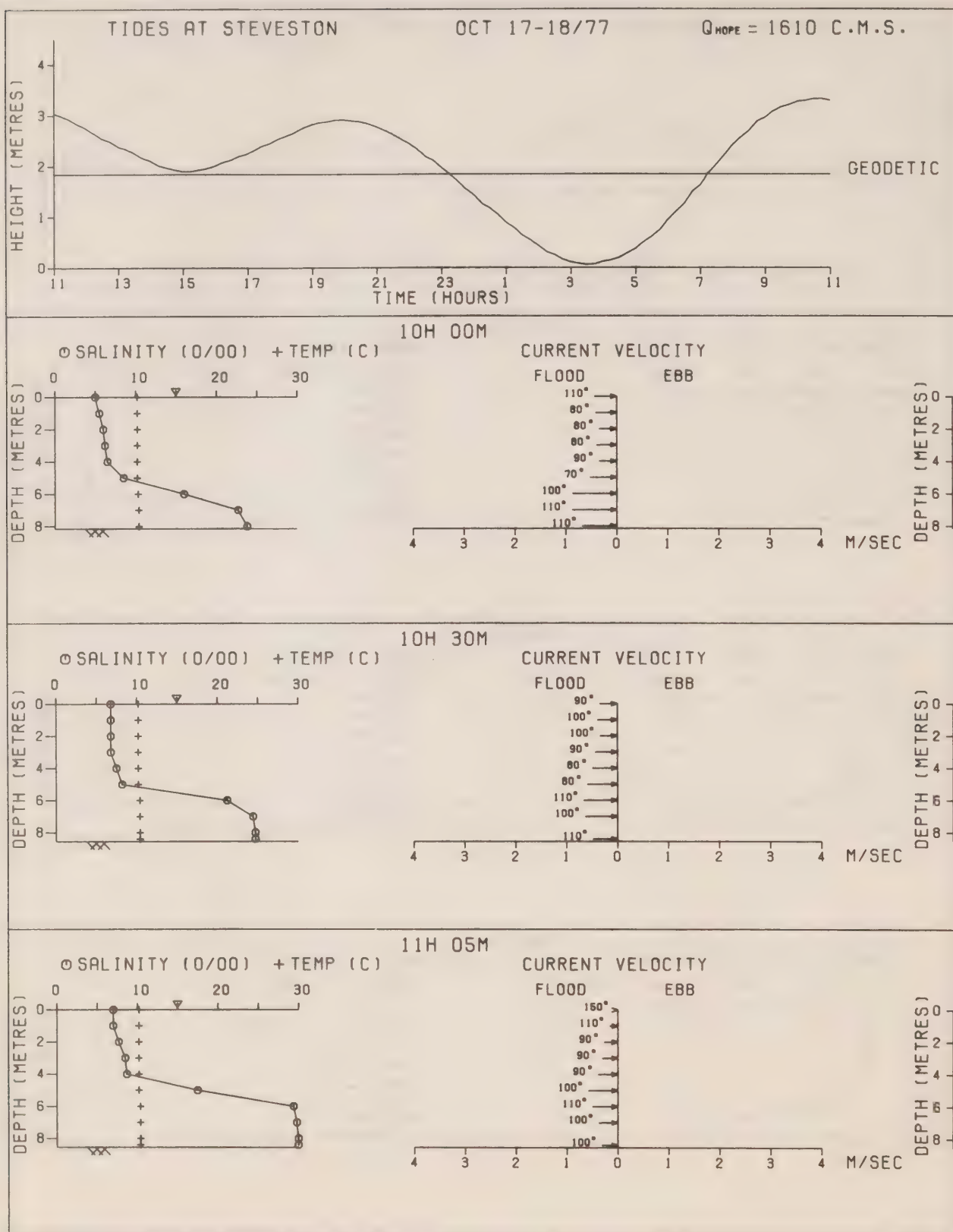


Figure 69

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT TILBURY

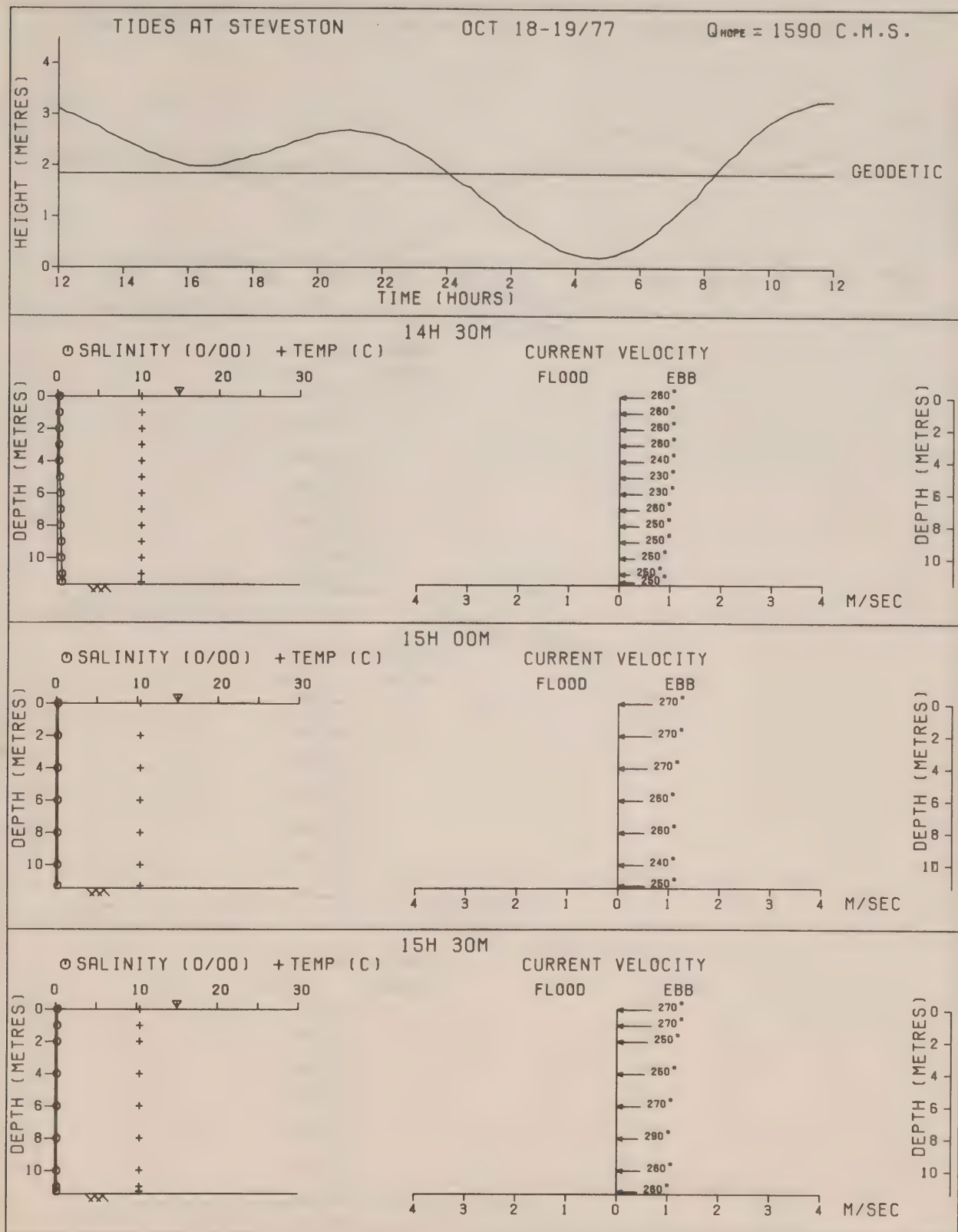


Figure 70

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT TILBURY

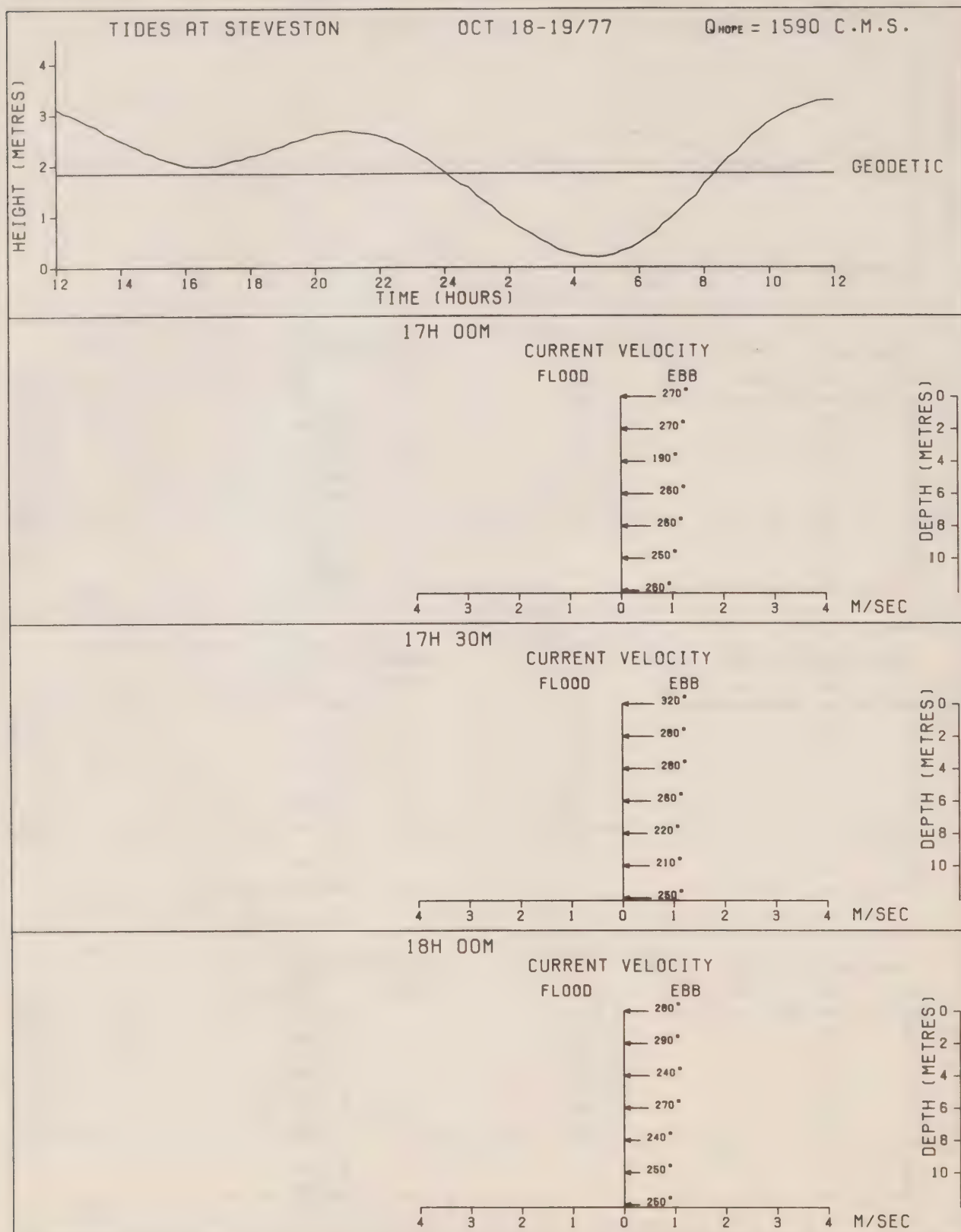


Figure 71

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT TILBURY

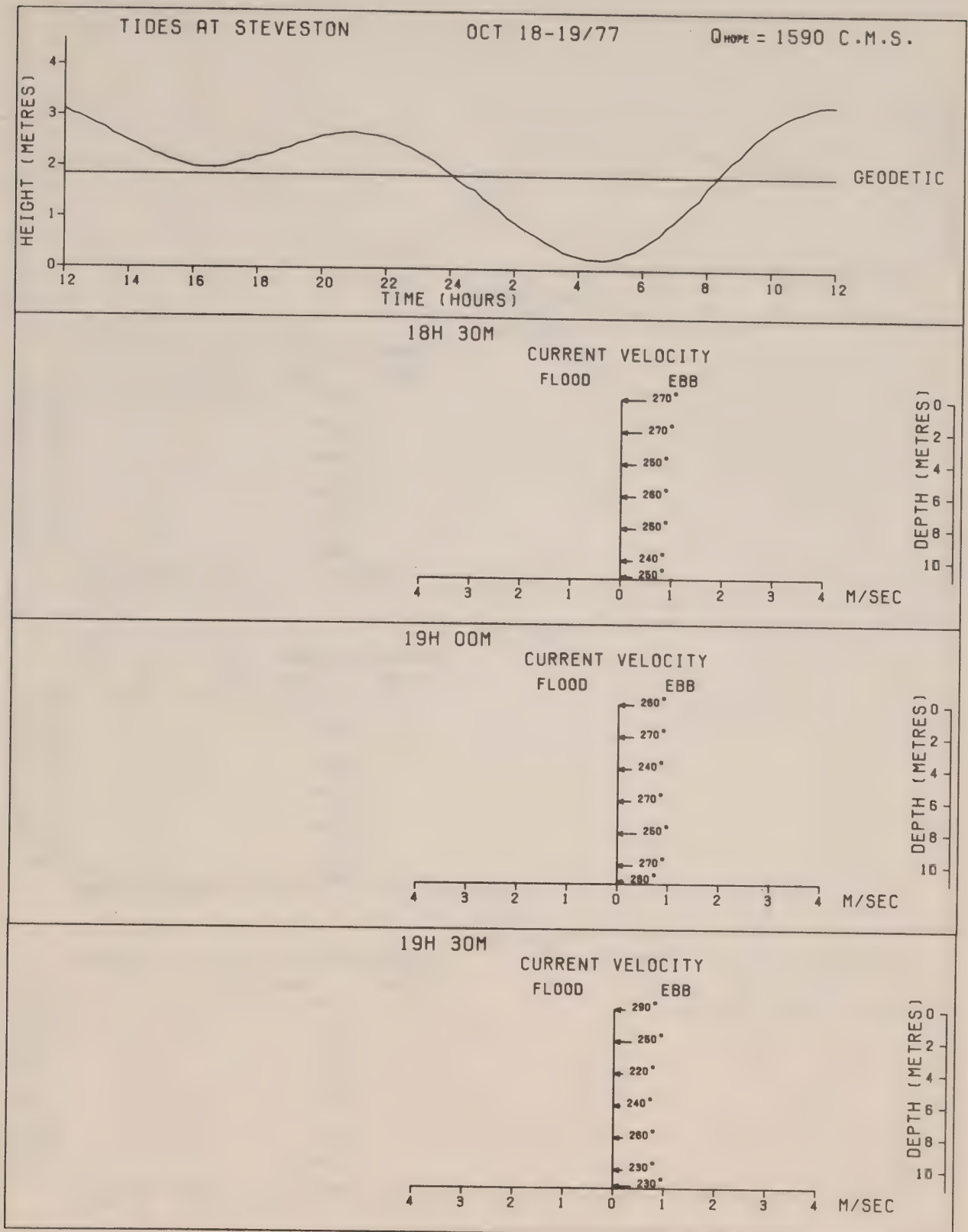




Figure 72

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT TILBURY

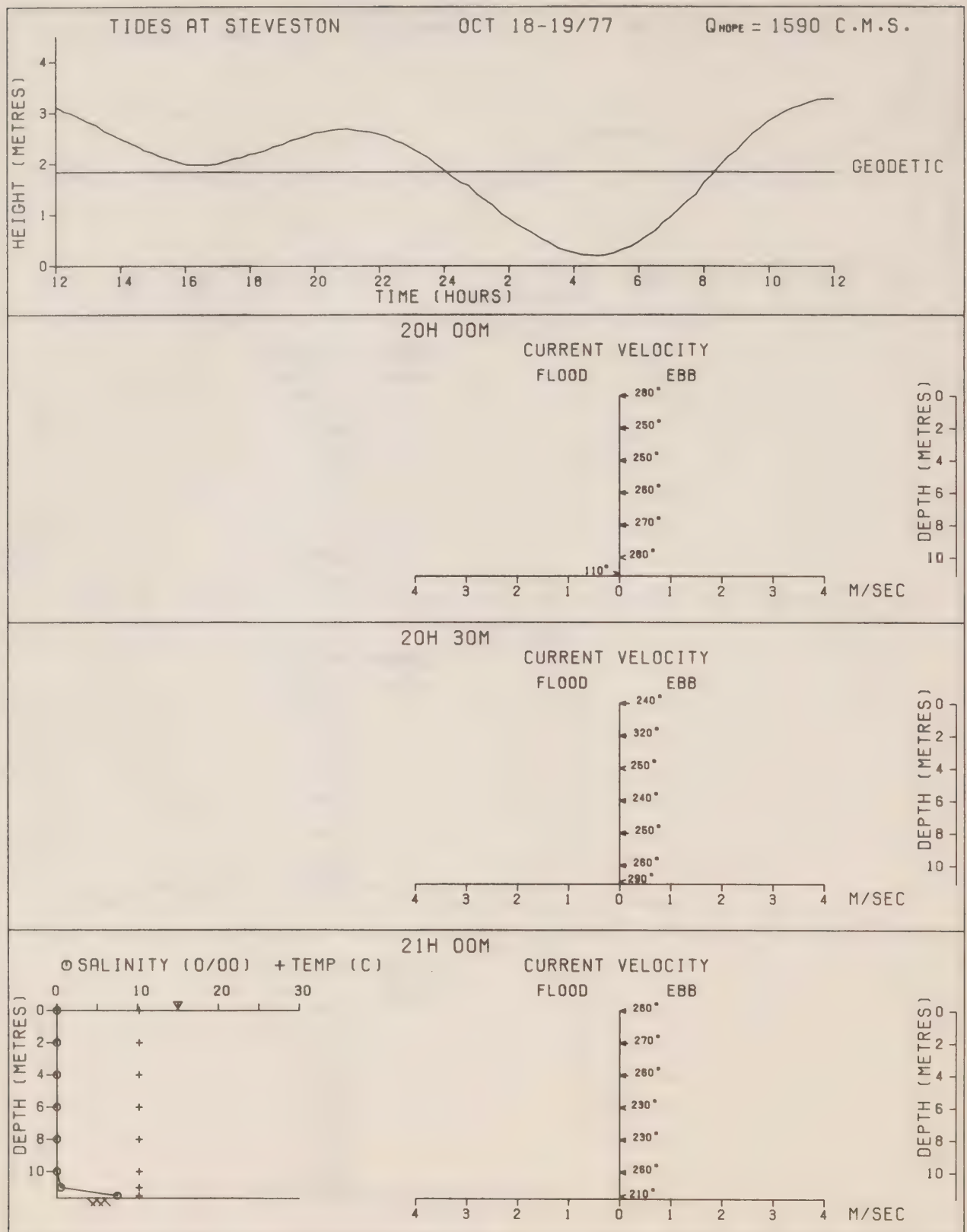


Figure 73

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT TILBURY

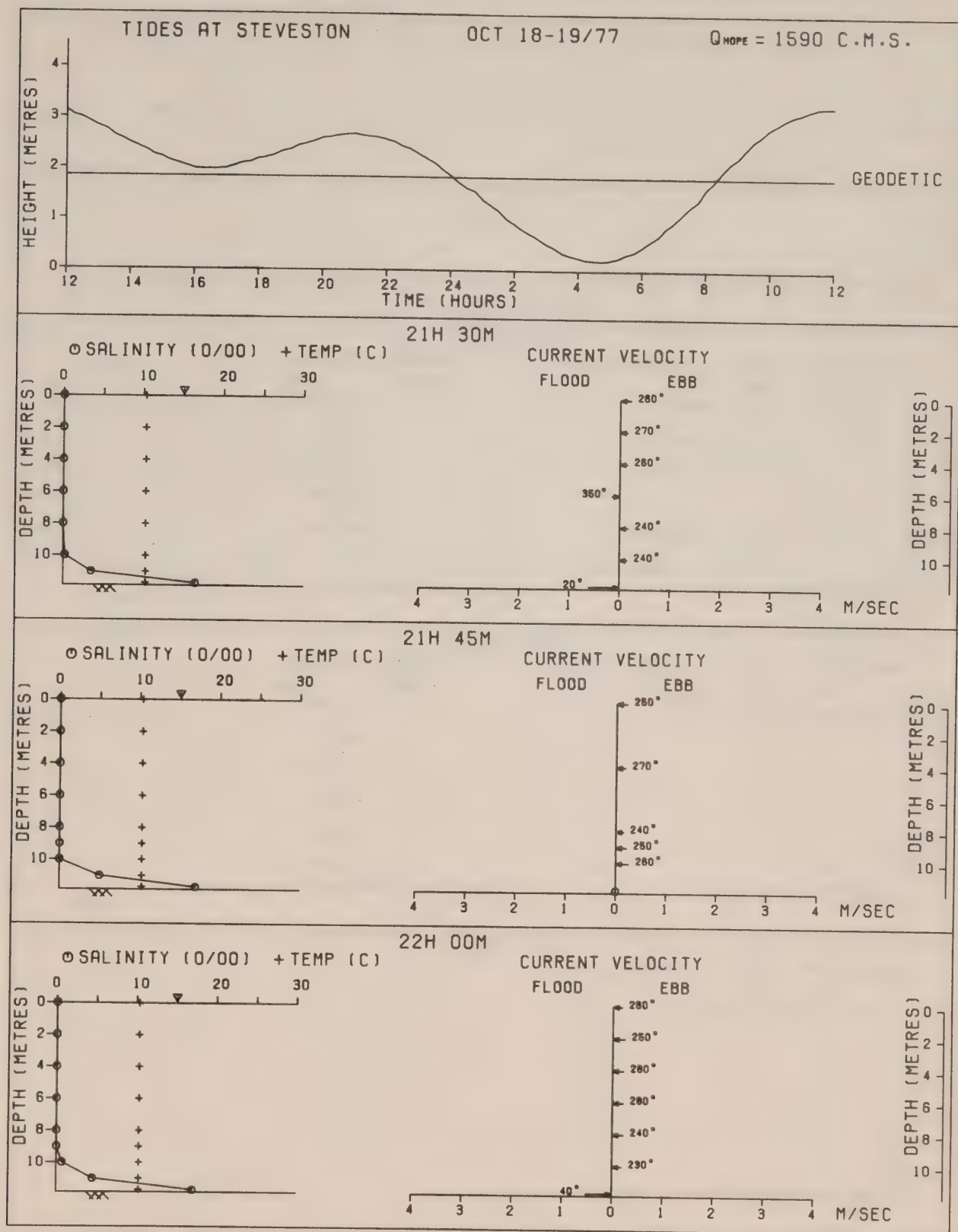
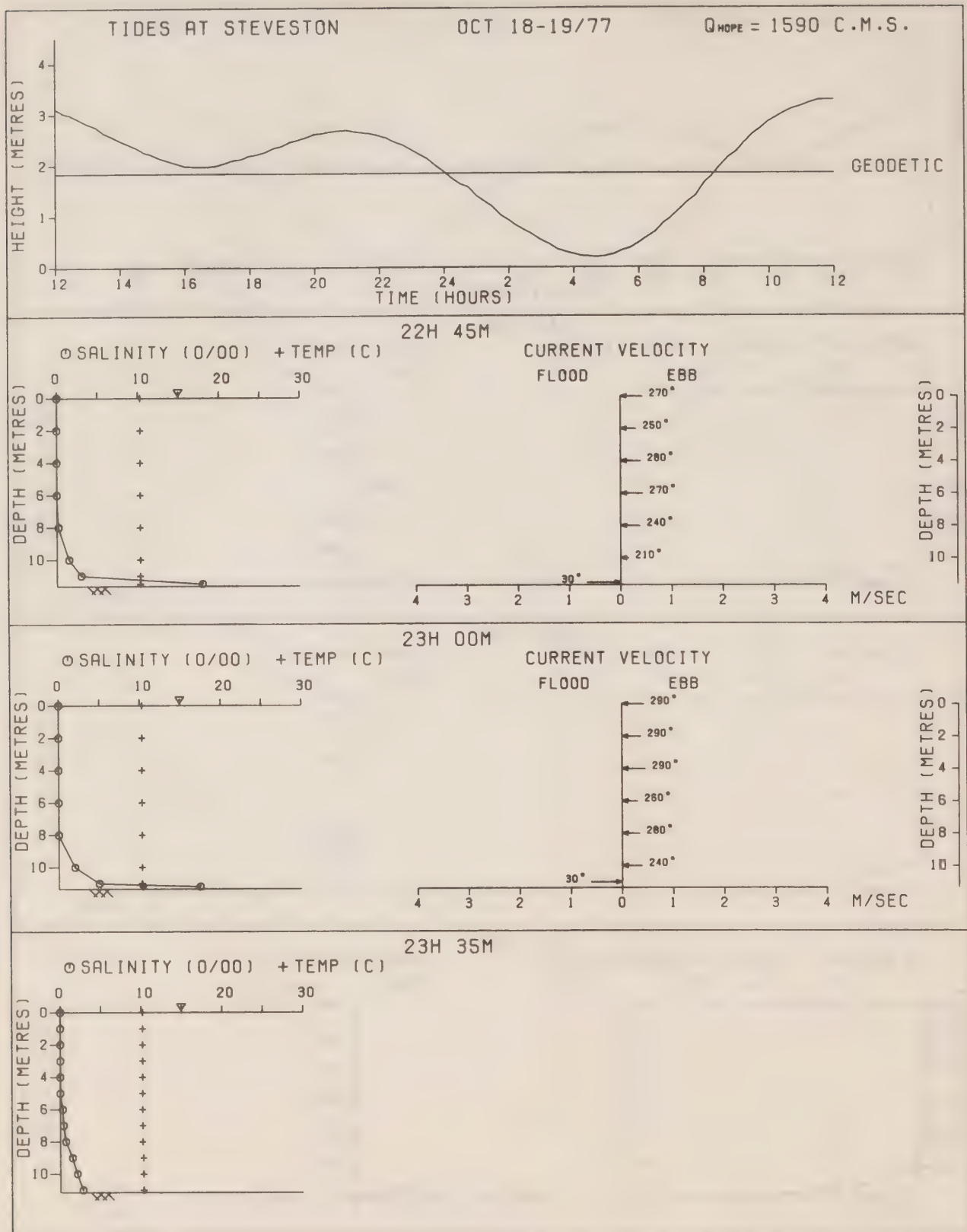


Figure 74

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT TILBURY



**Figure 75**

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT TILBURY

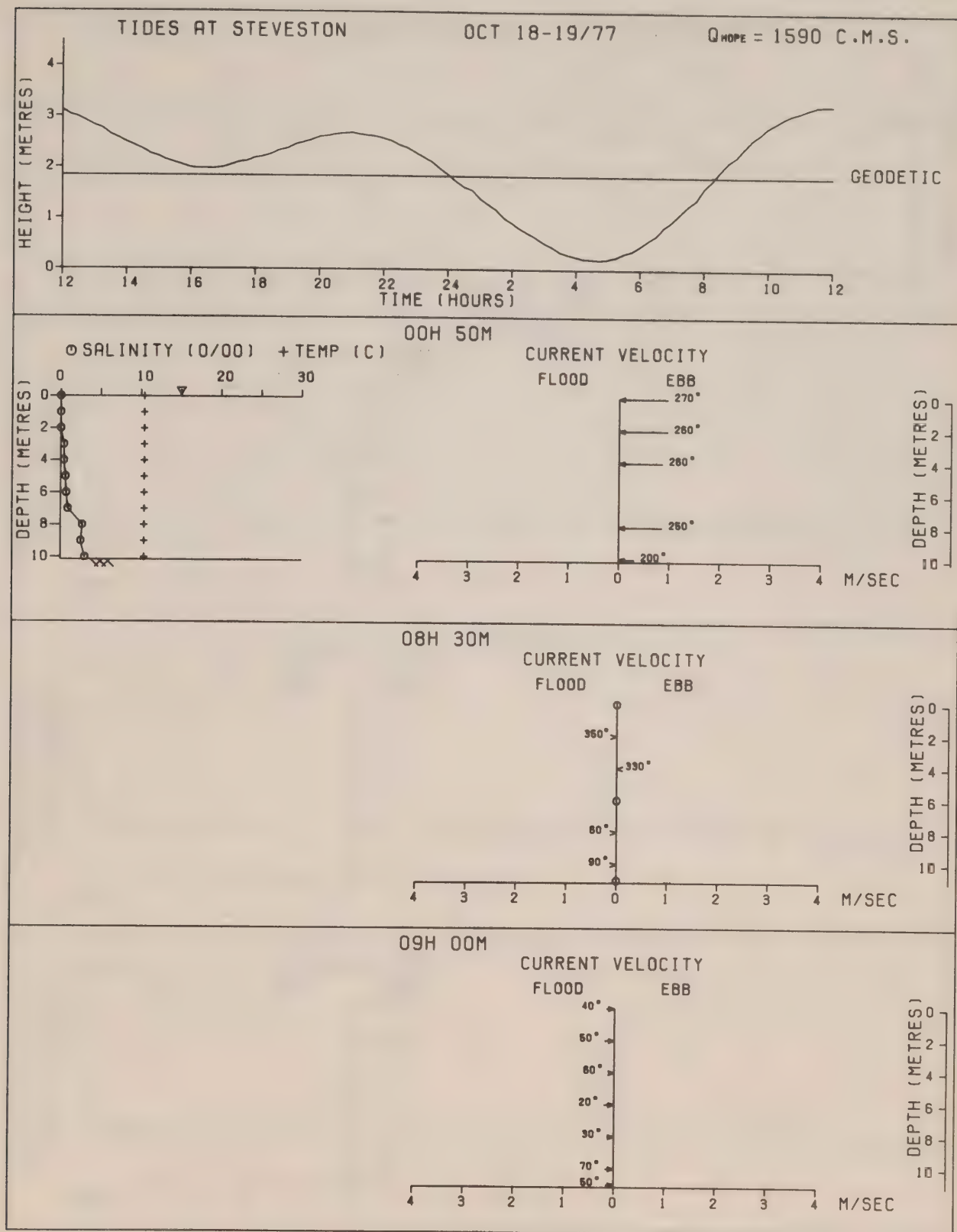




Figure 76

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT TILBURY

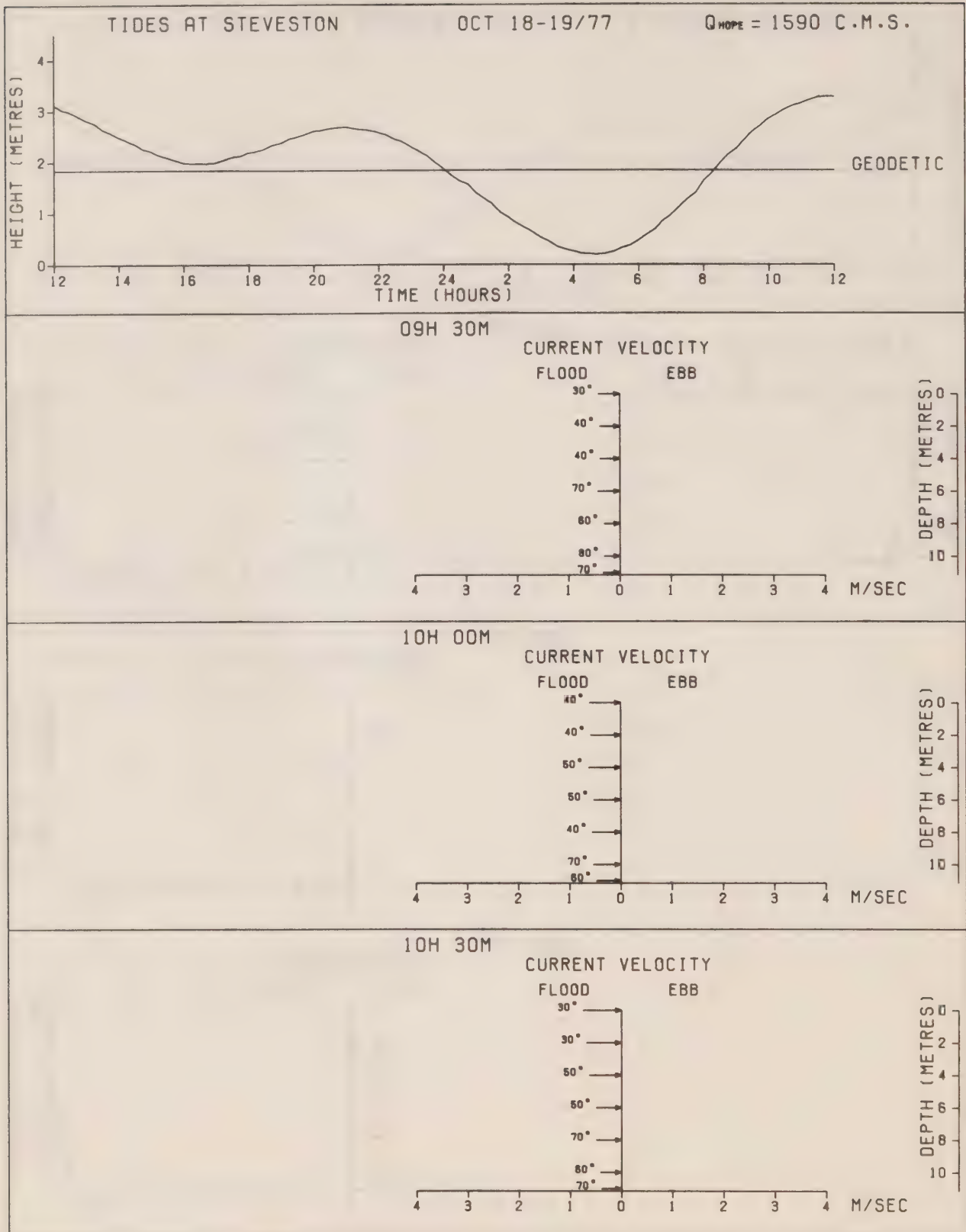


Figure 77

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT OAK ST.

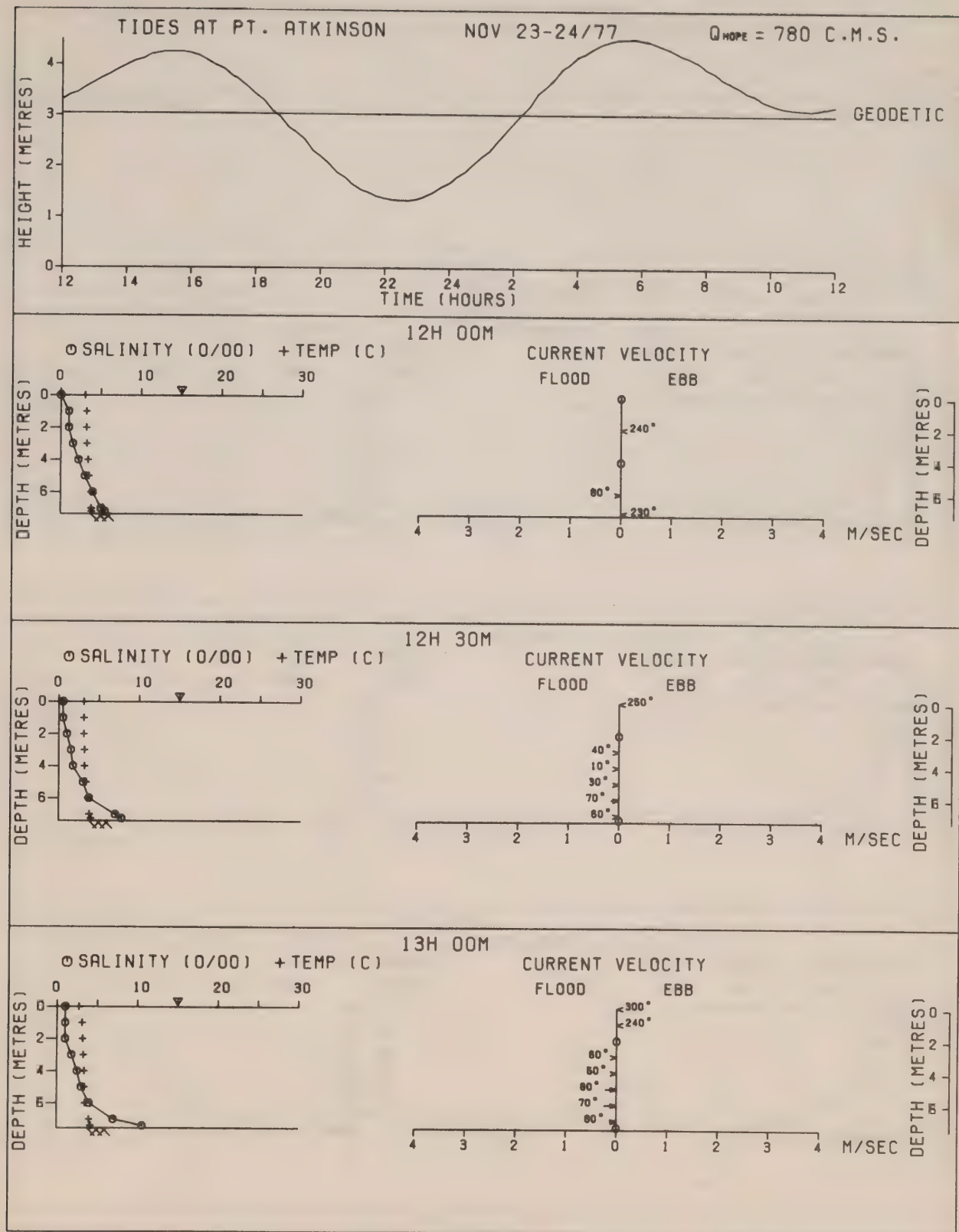


Figure 78

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT OAK ST.

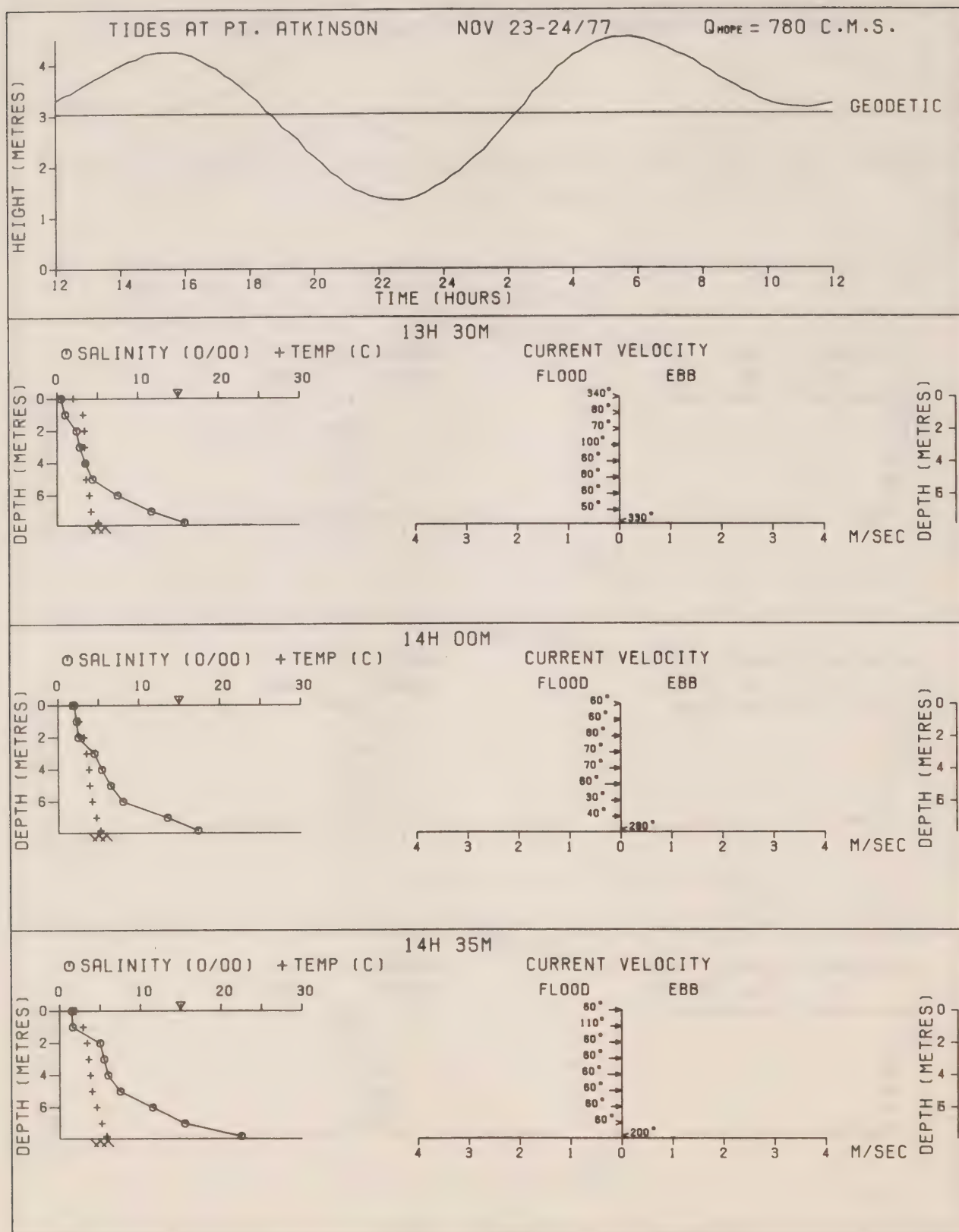
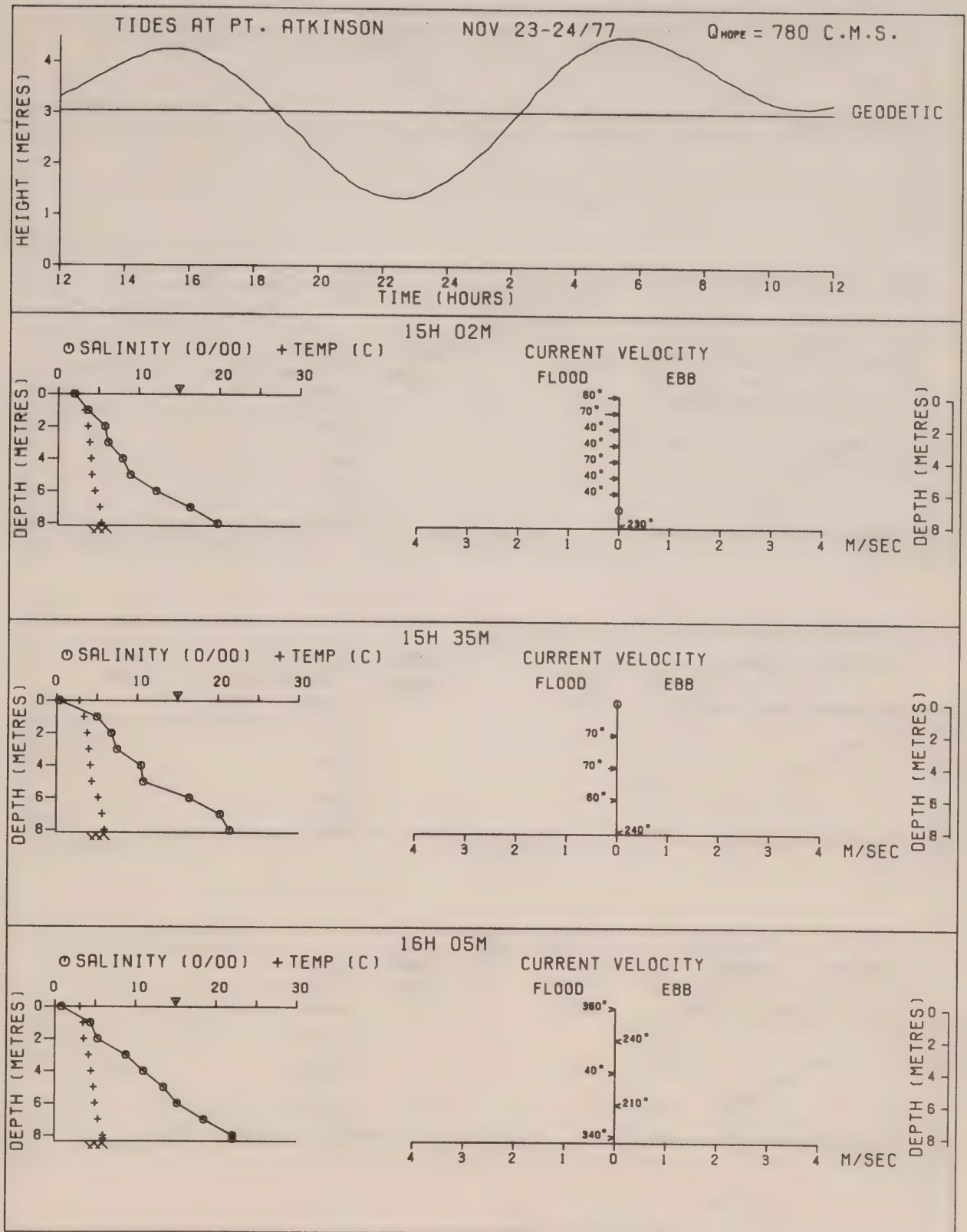


Figure 79

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT OAK ST.





**Figure 80.**  
SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT OAK ST.

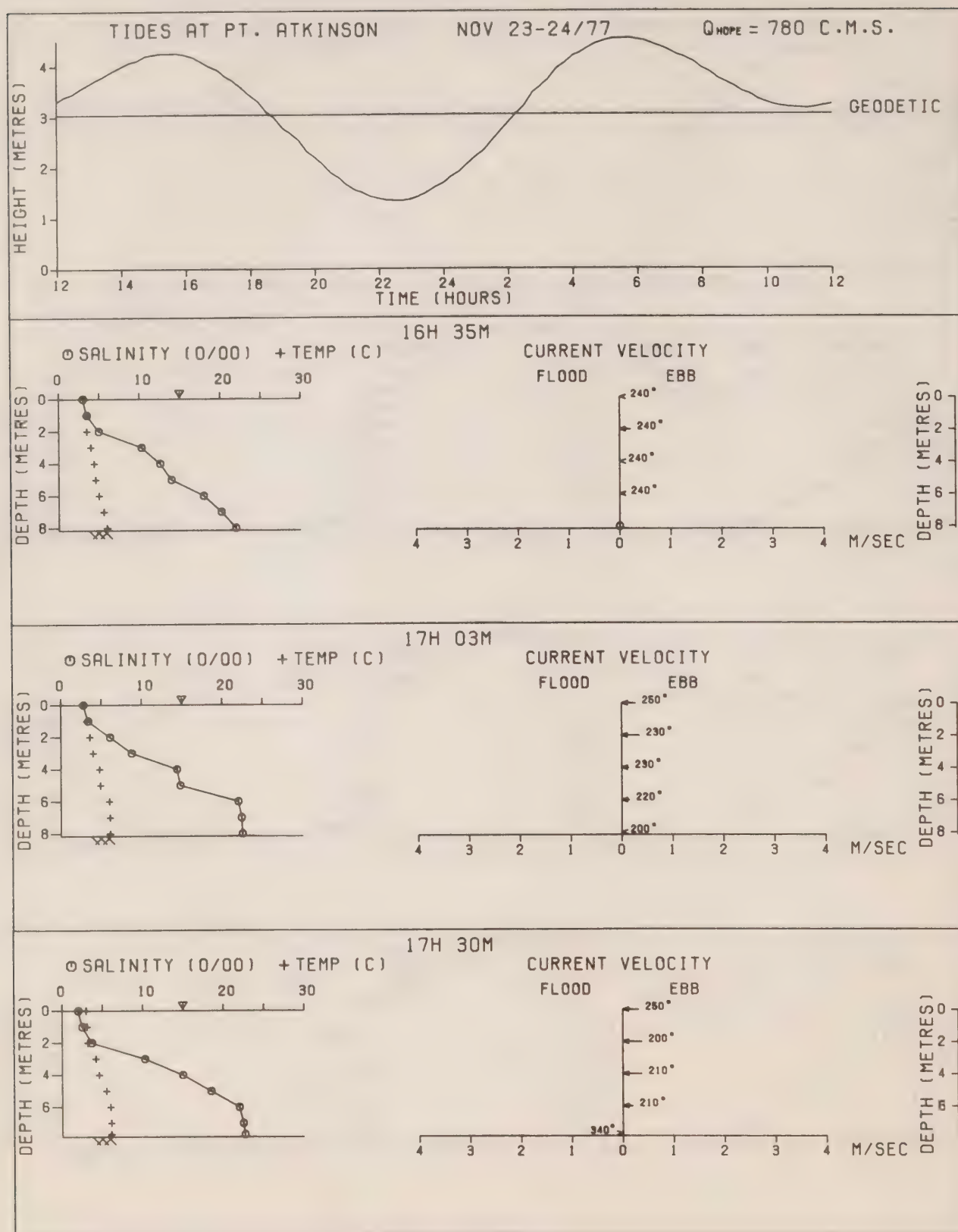


Figure 81

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT OAK ST.

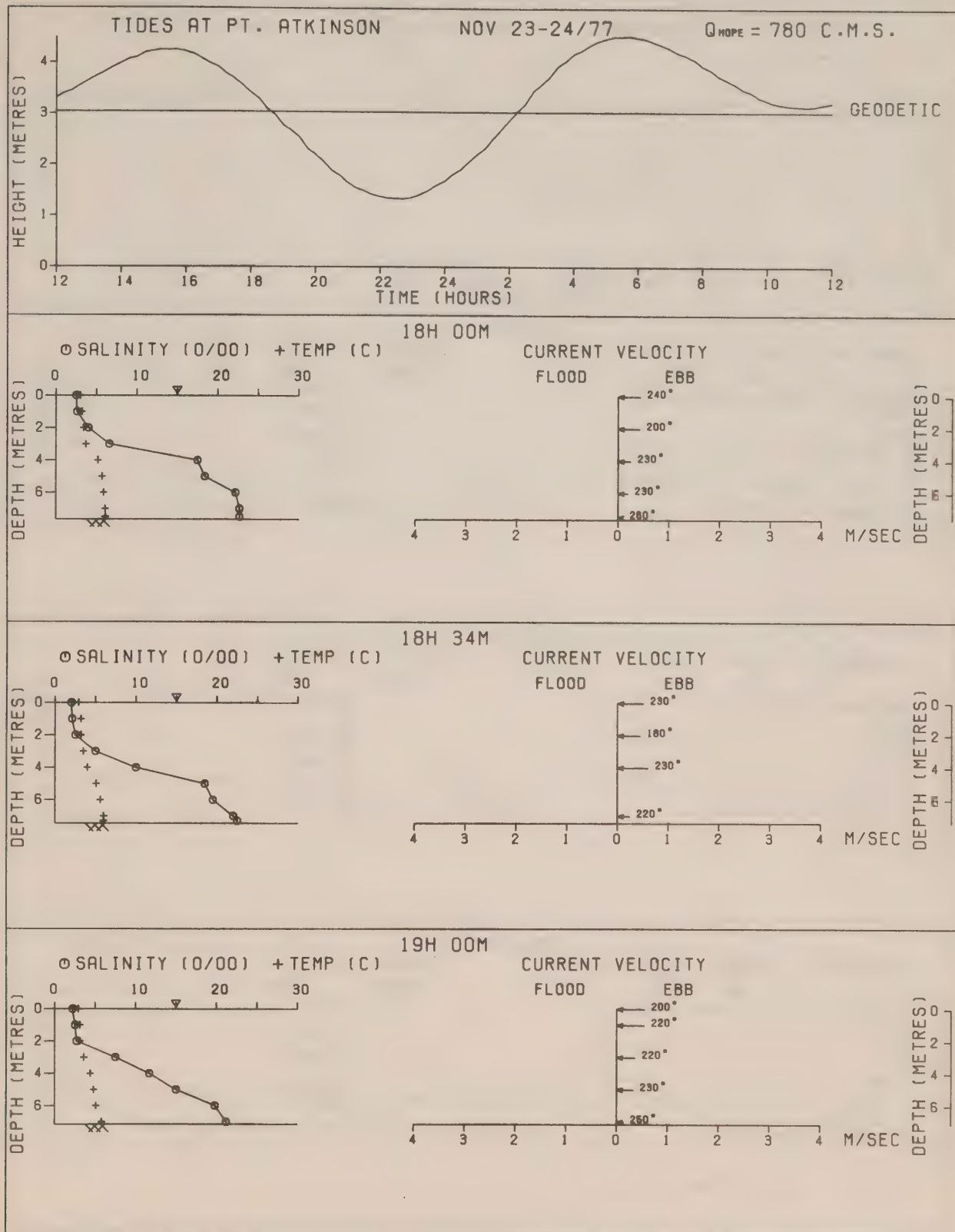


Figure 82

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT OAK ST.

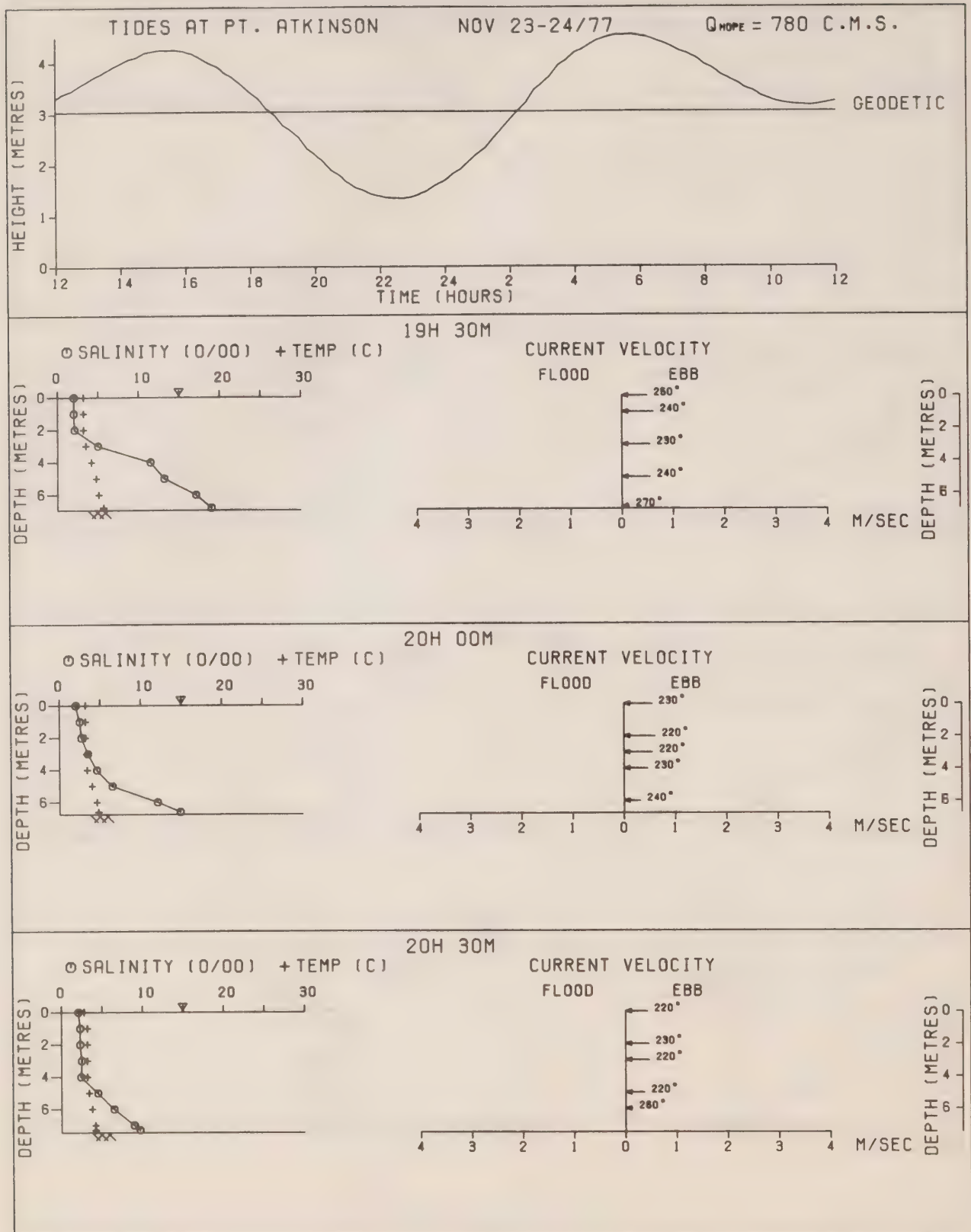


Figure 83

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT OAK ST.

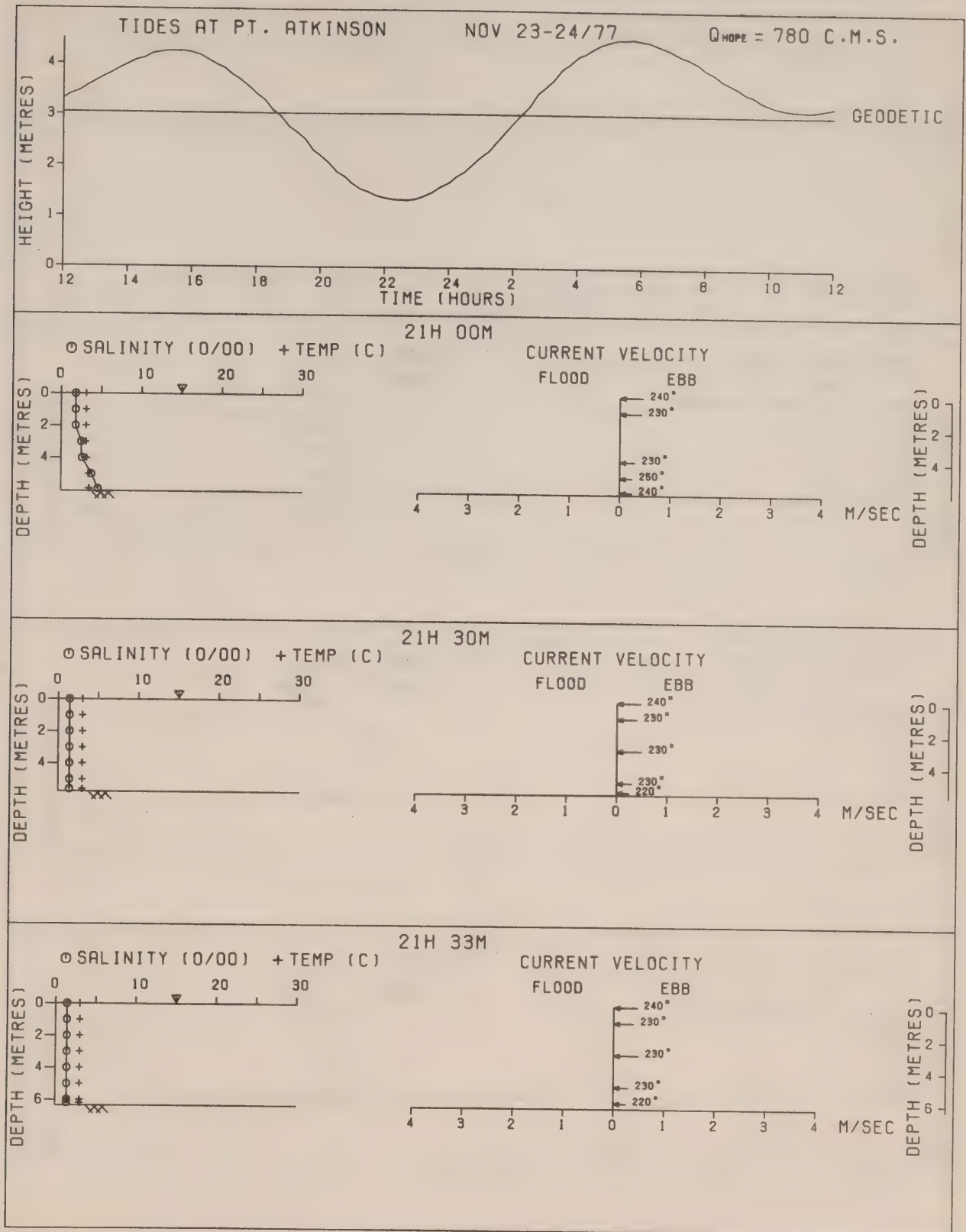




Figure 84

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT OAK ST.

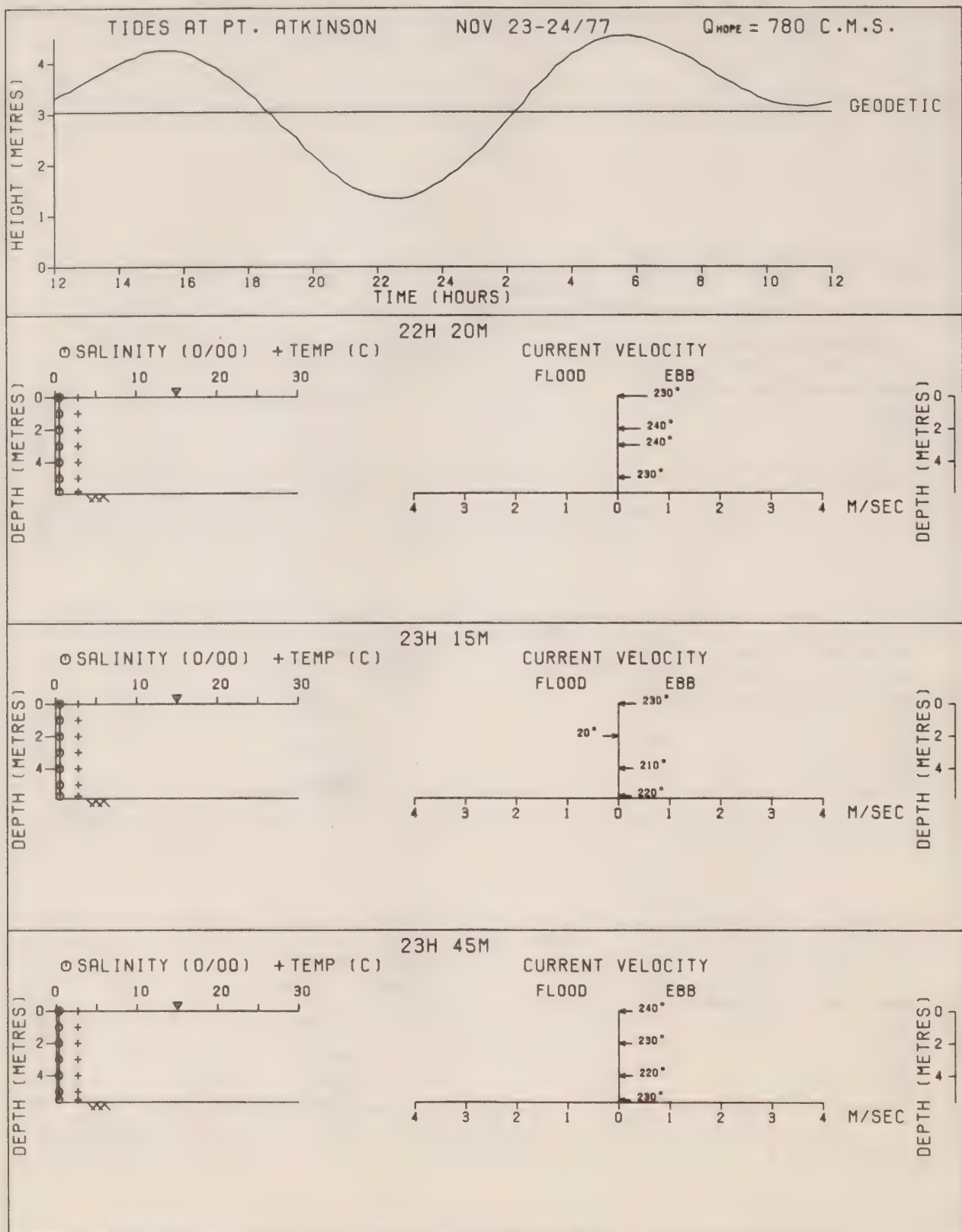
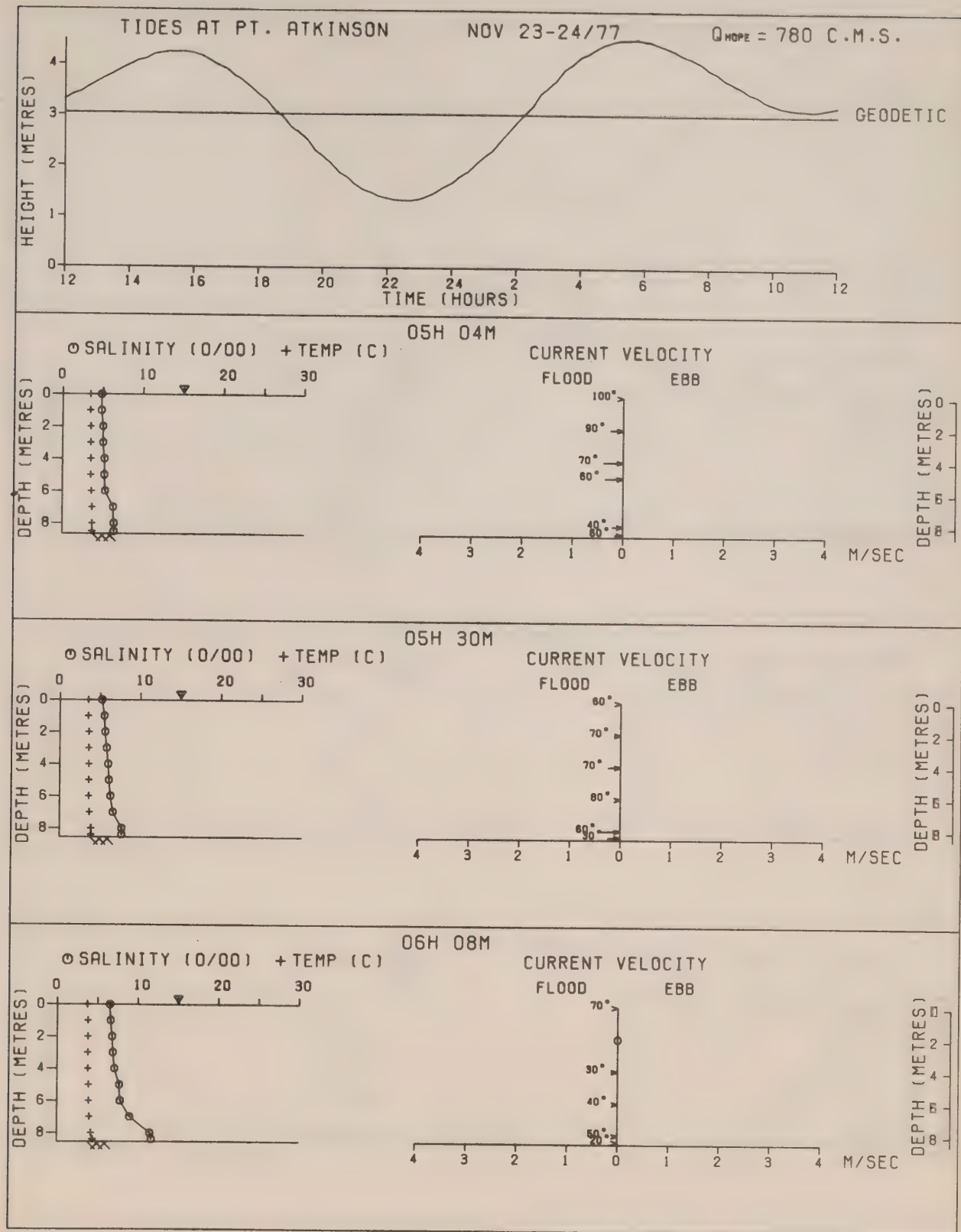


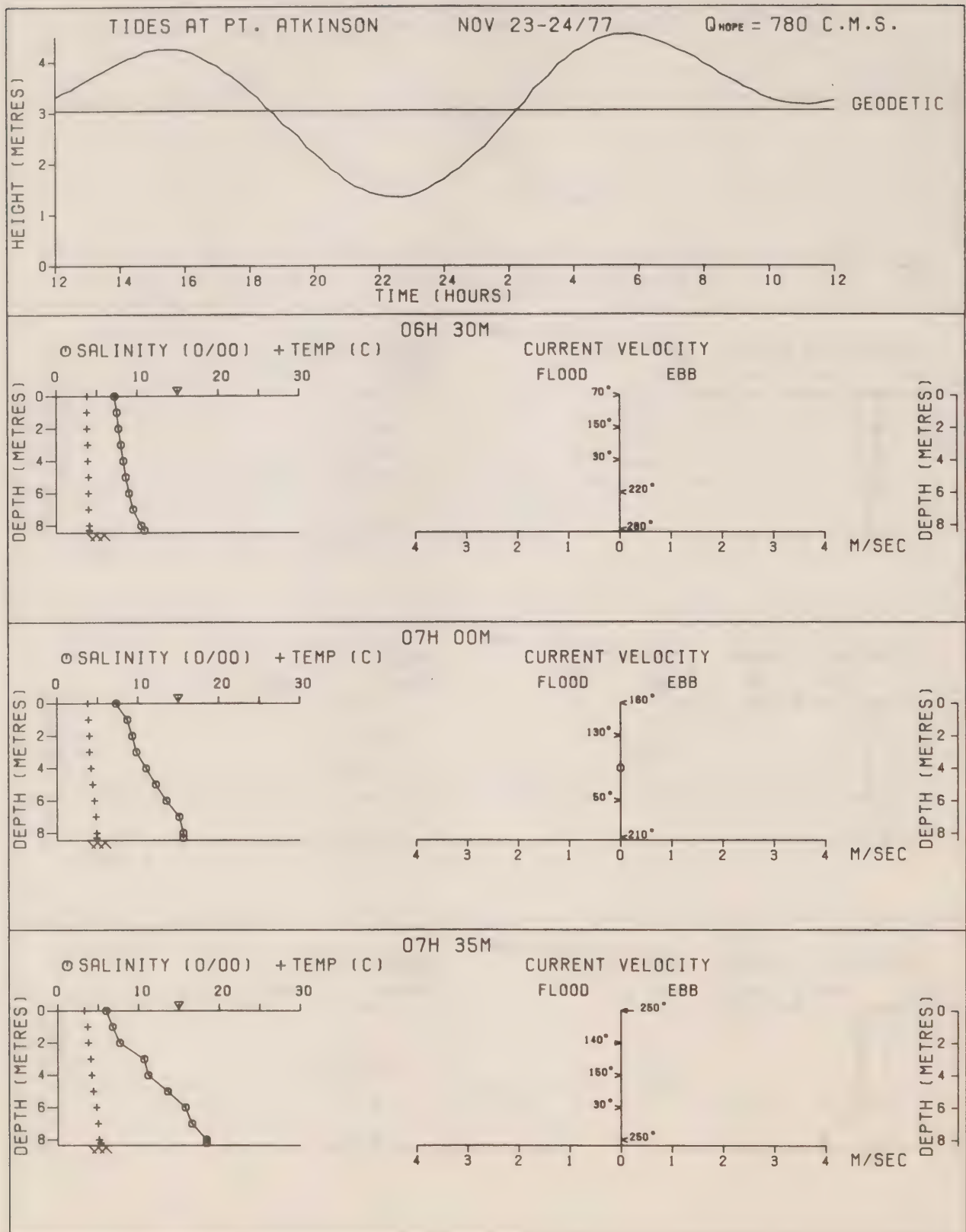
Figure 85

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT OAK ST.



**Figure 86**

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT OAK ST.



**Figure 87**

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT OAK ST.

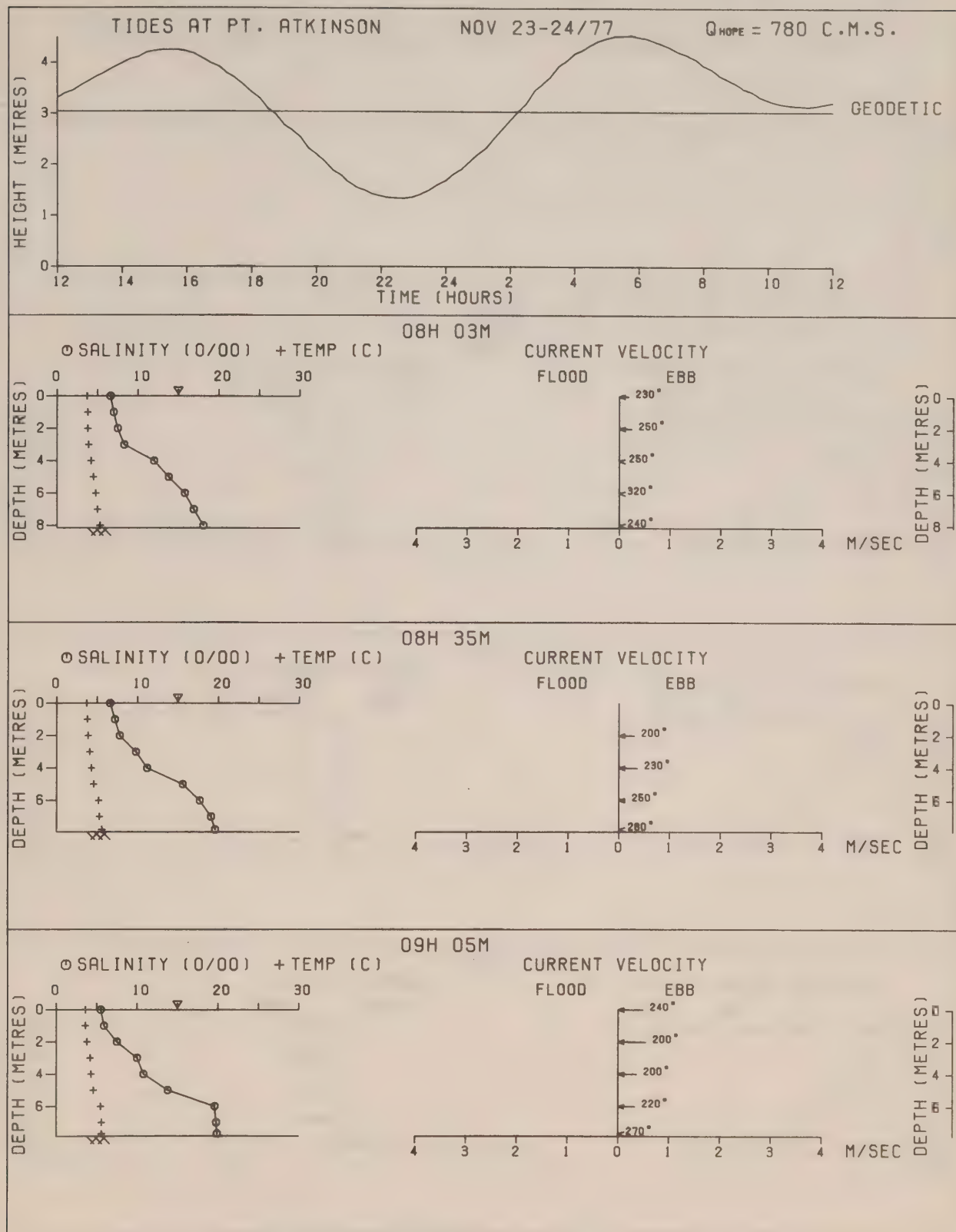
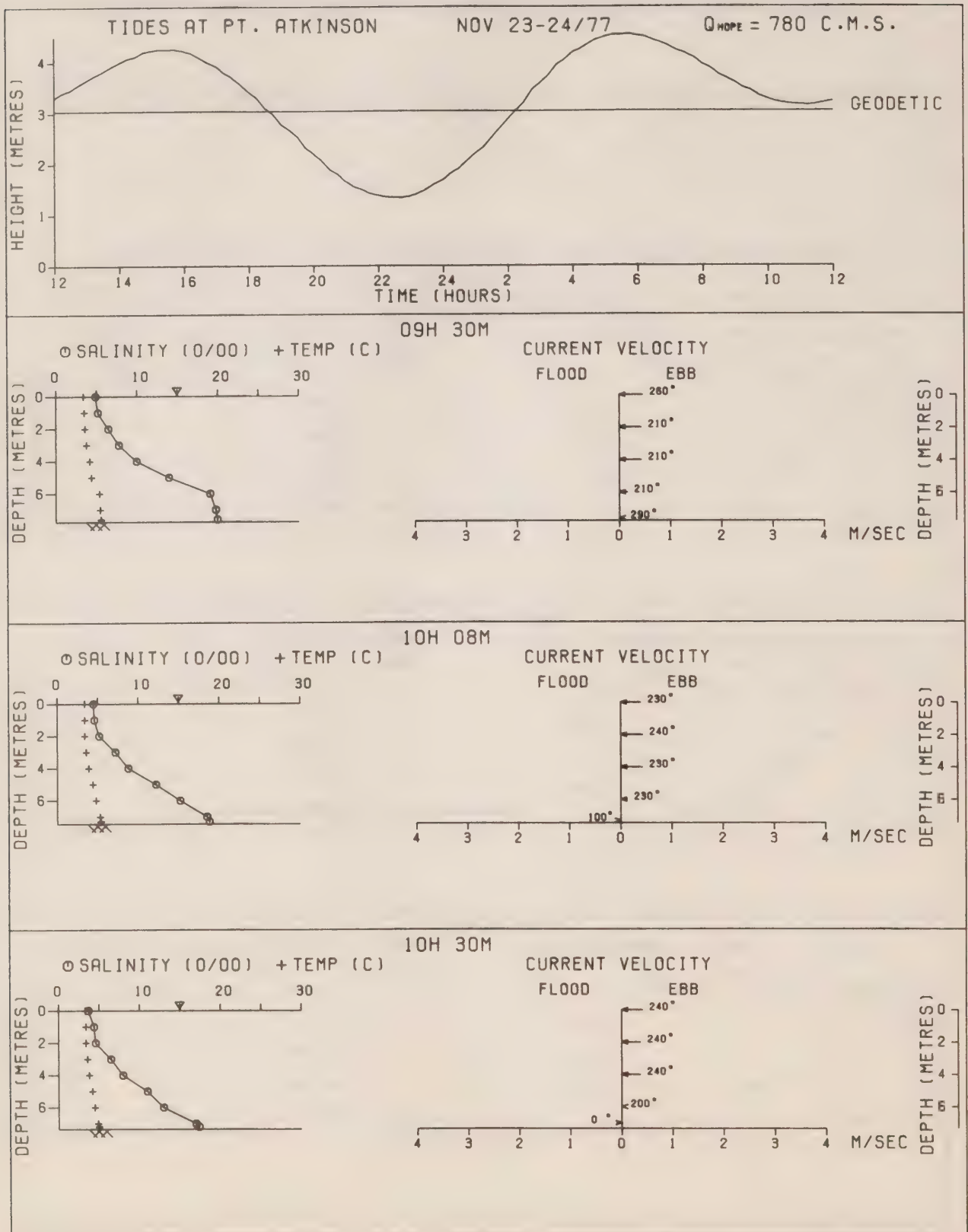




Figure 88

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT OAK ST.



**Figure 89**

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT OAK ST.

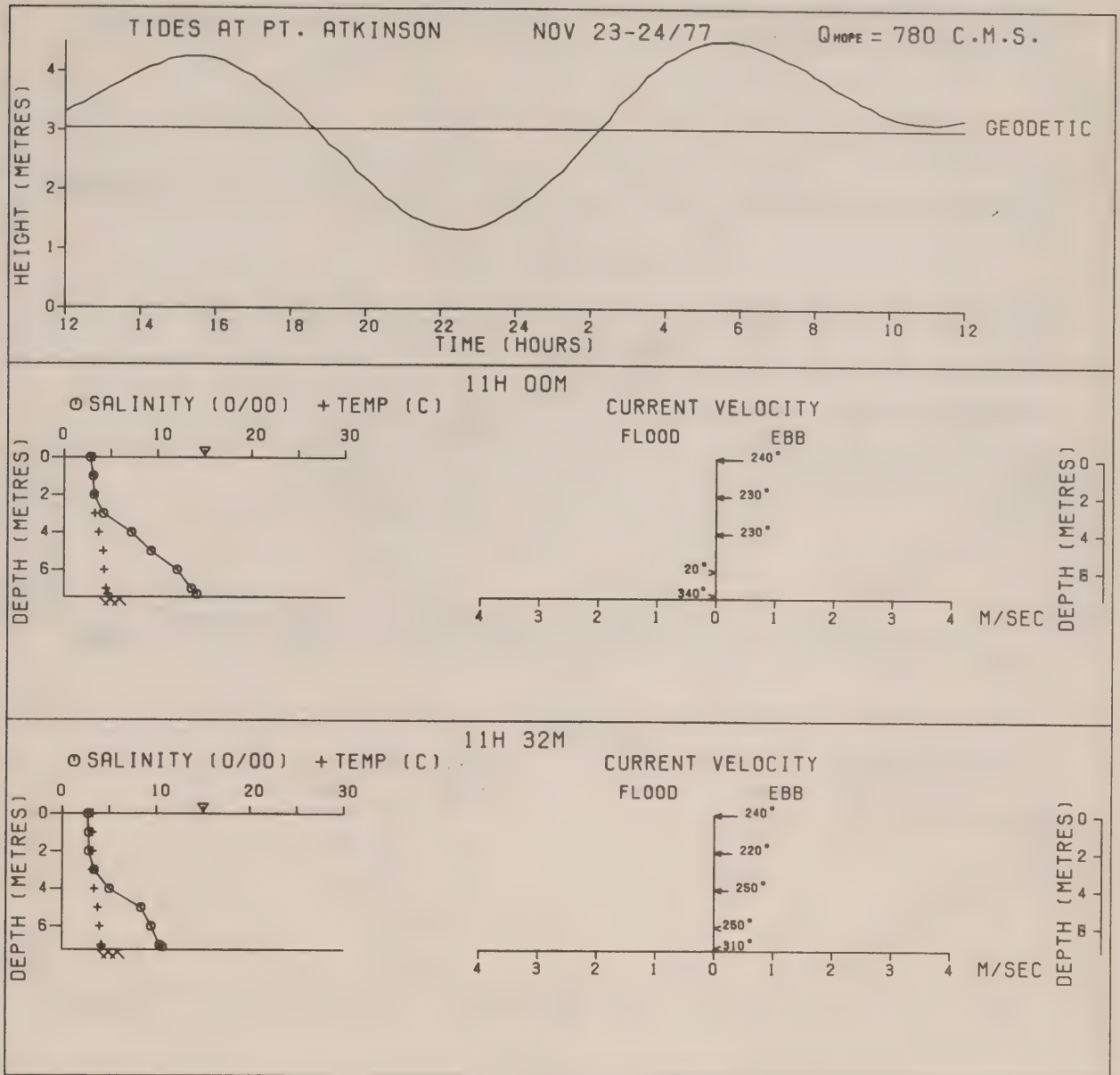


Figure 90

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

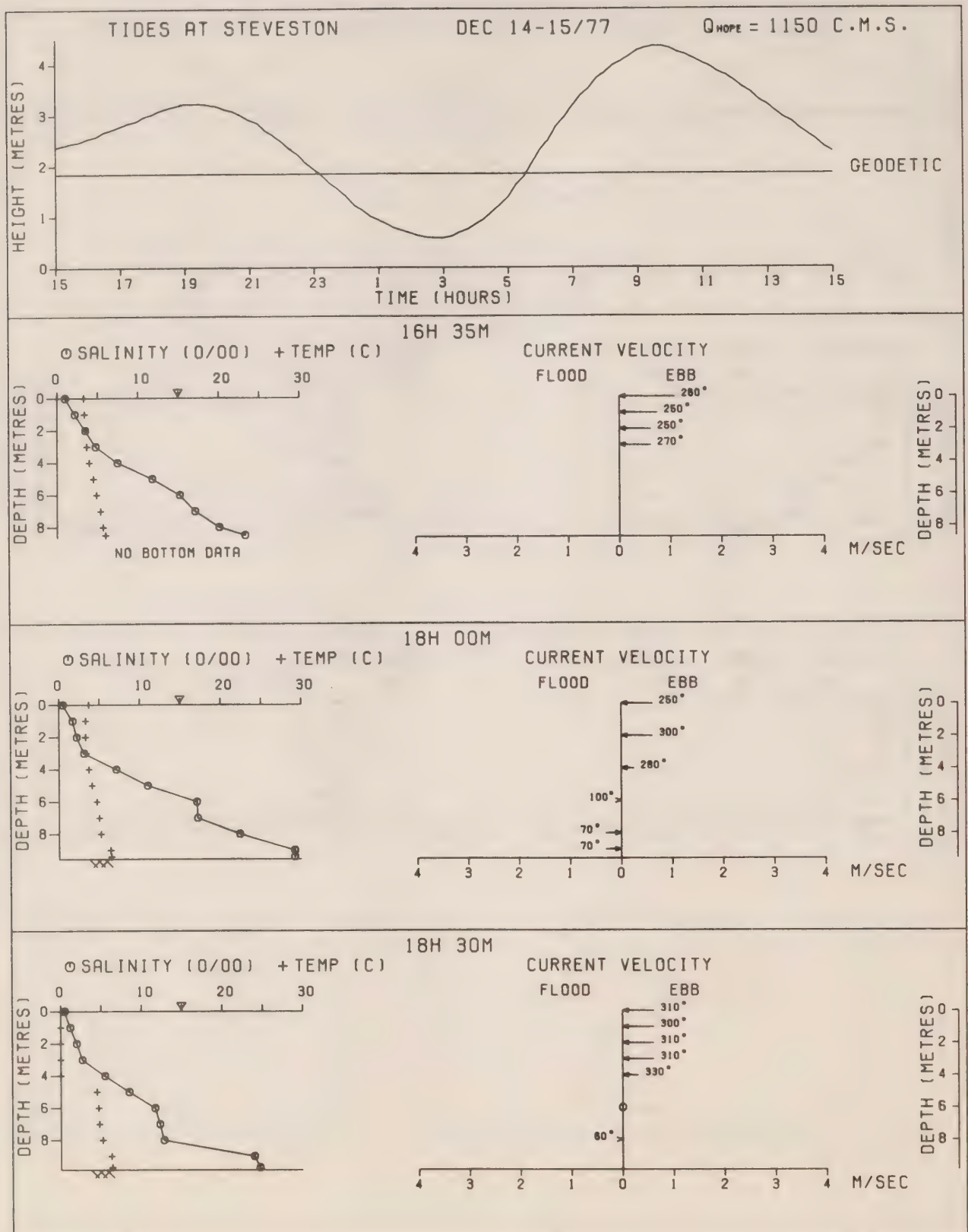


Figure 91

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

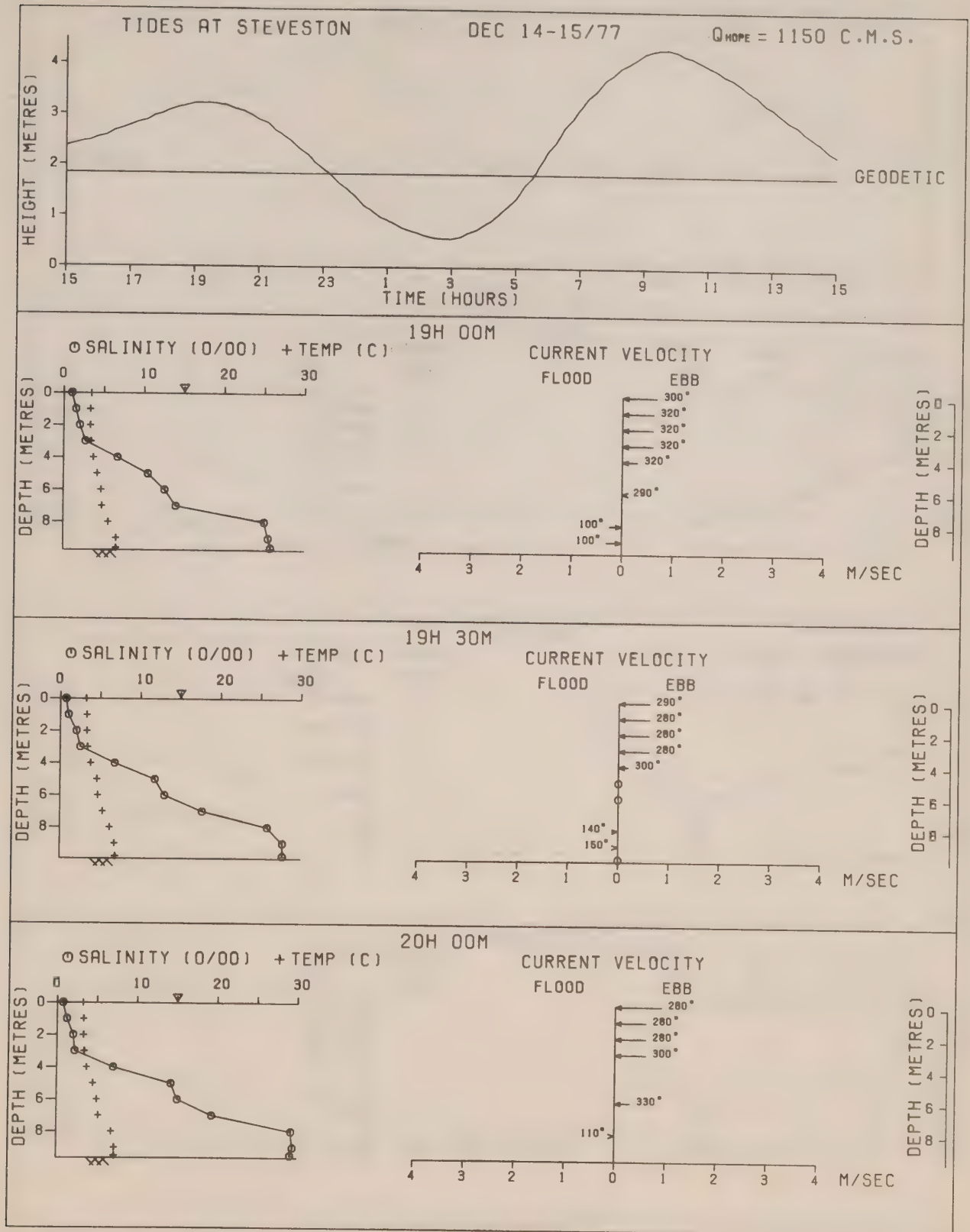




Figure 92

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

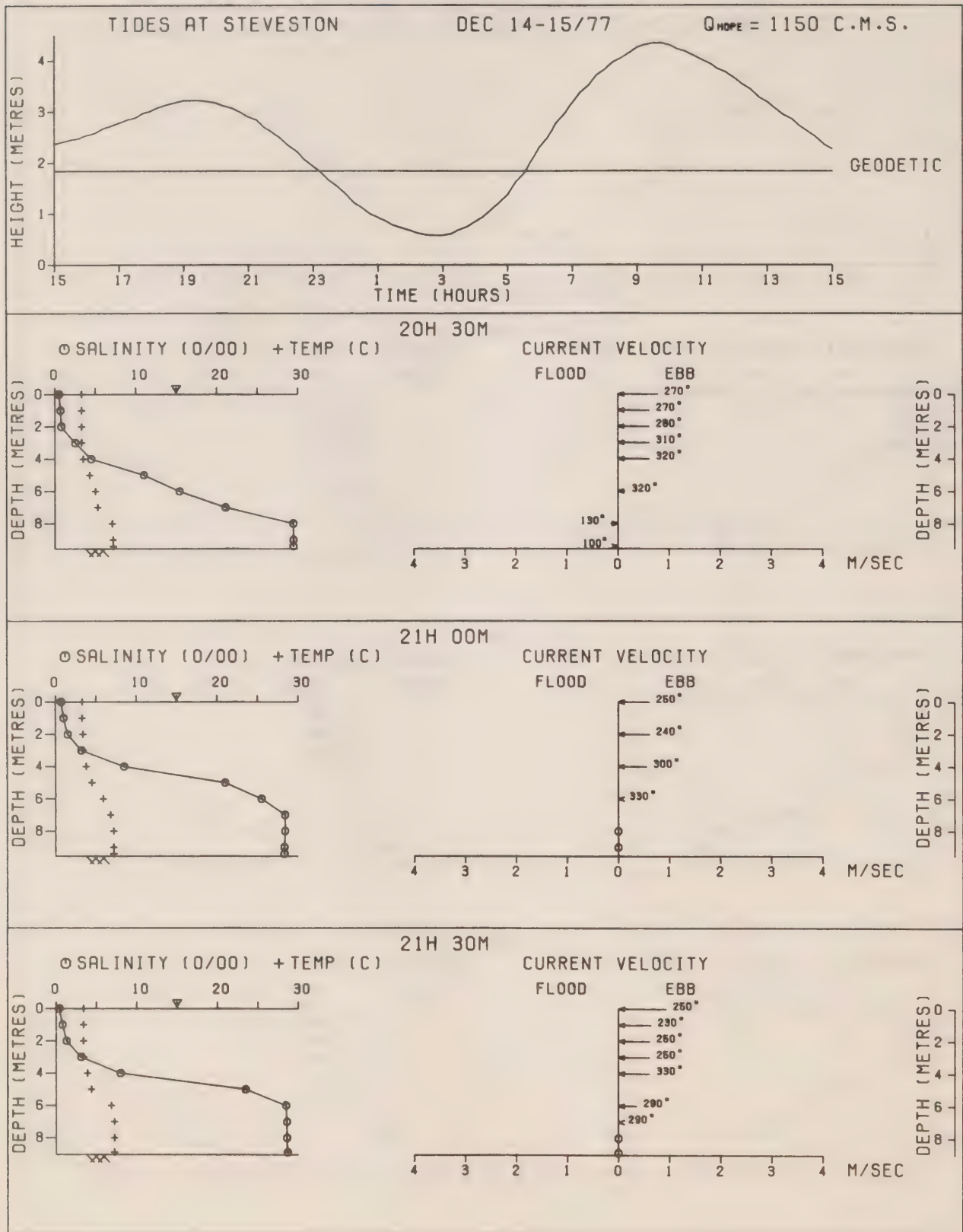


Figure 93

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

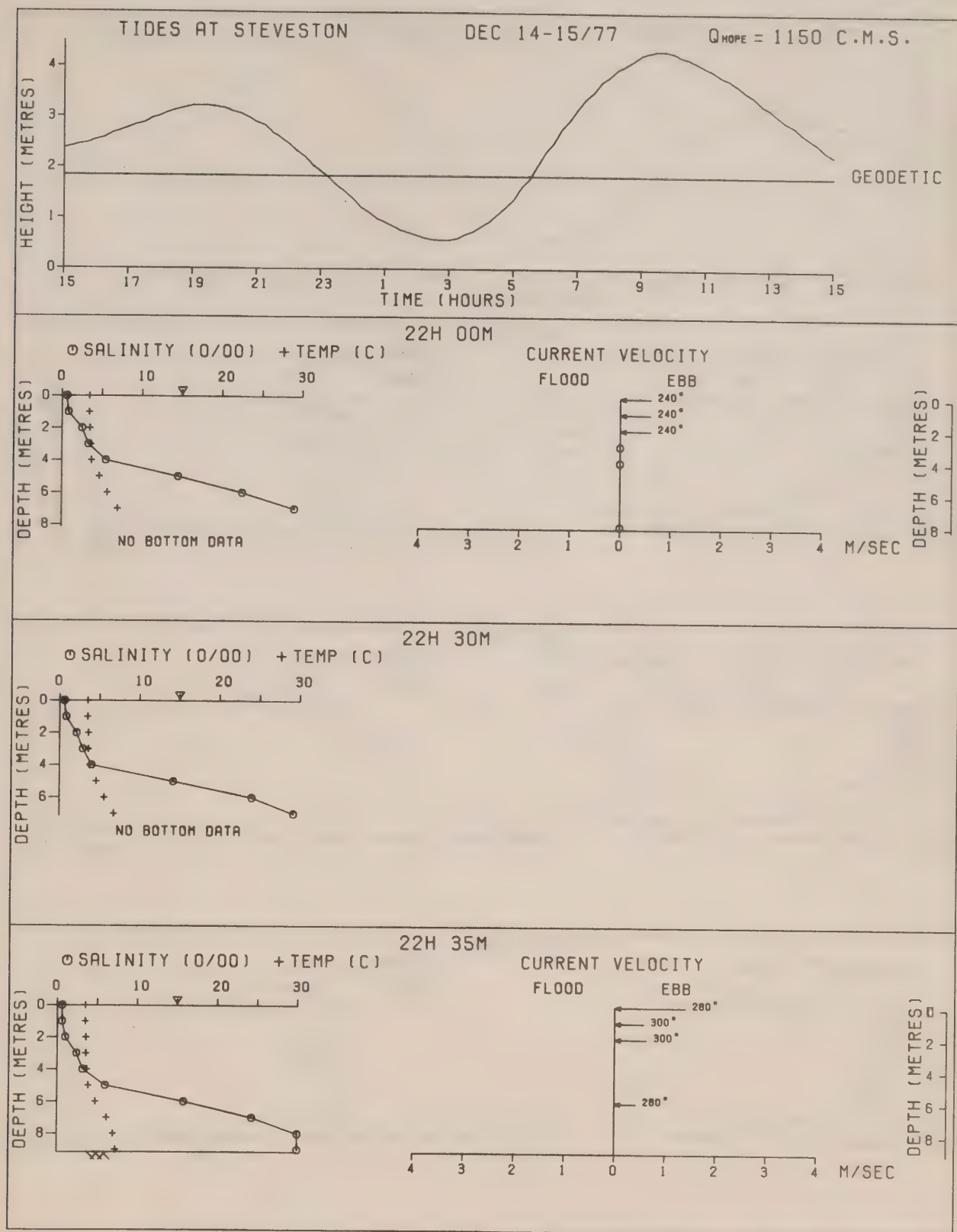
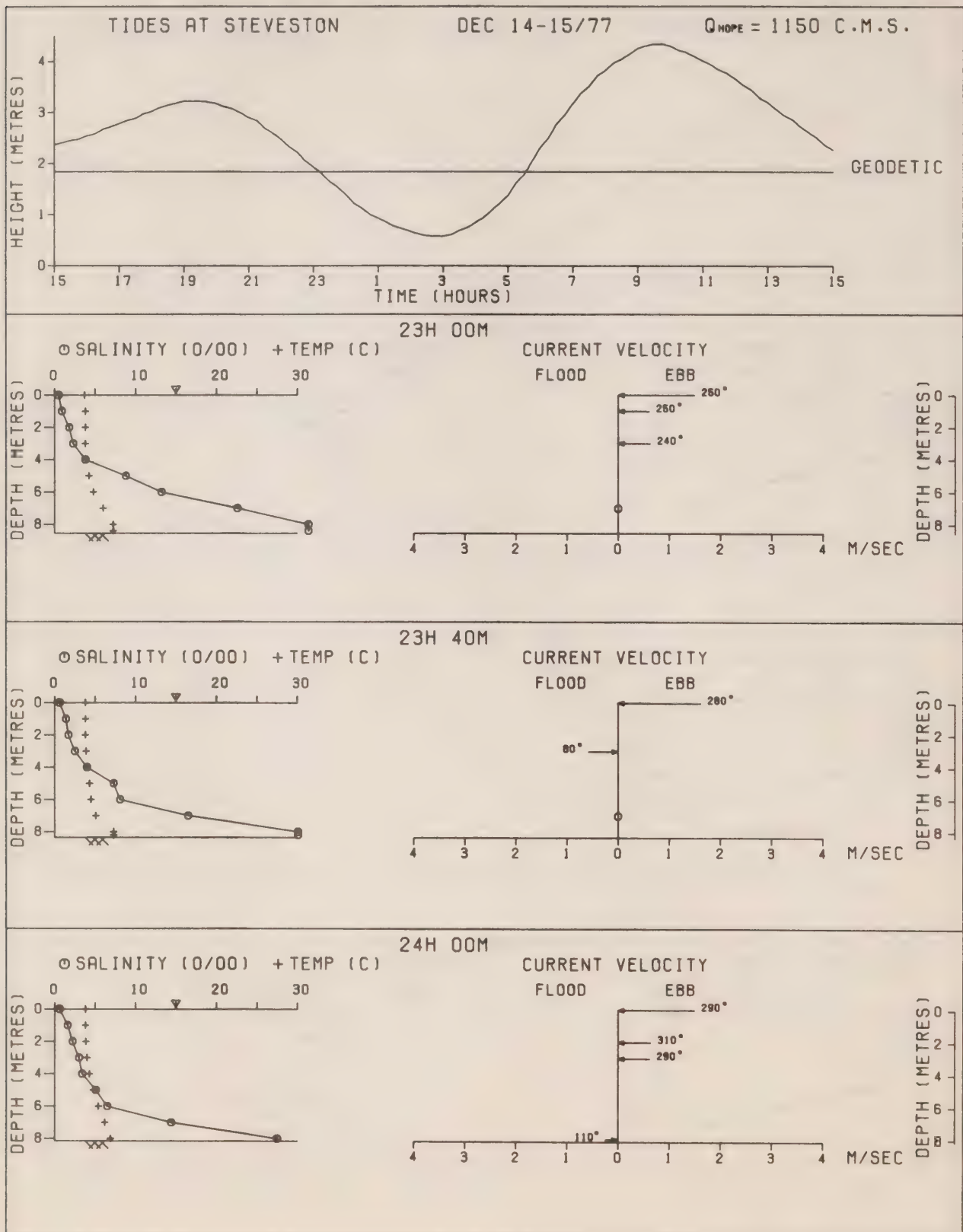


Figure 94

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21



**Figure 95**

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

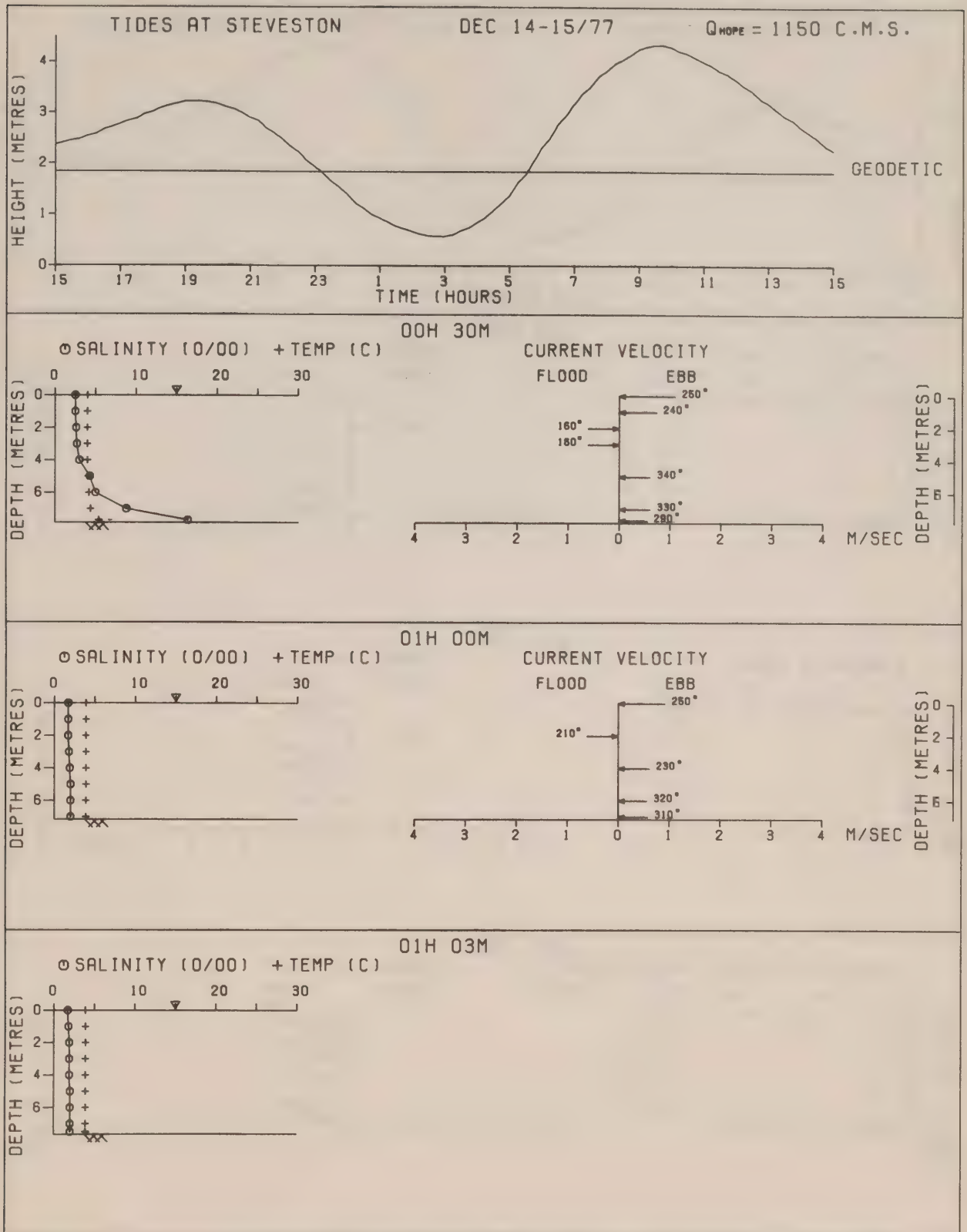
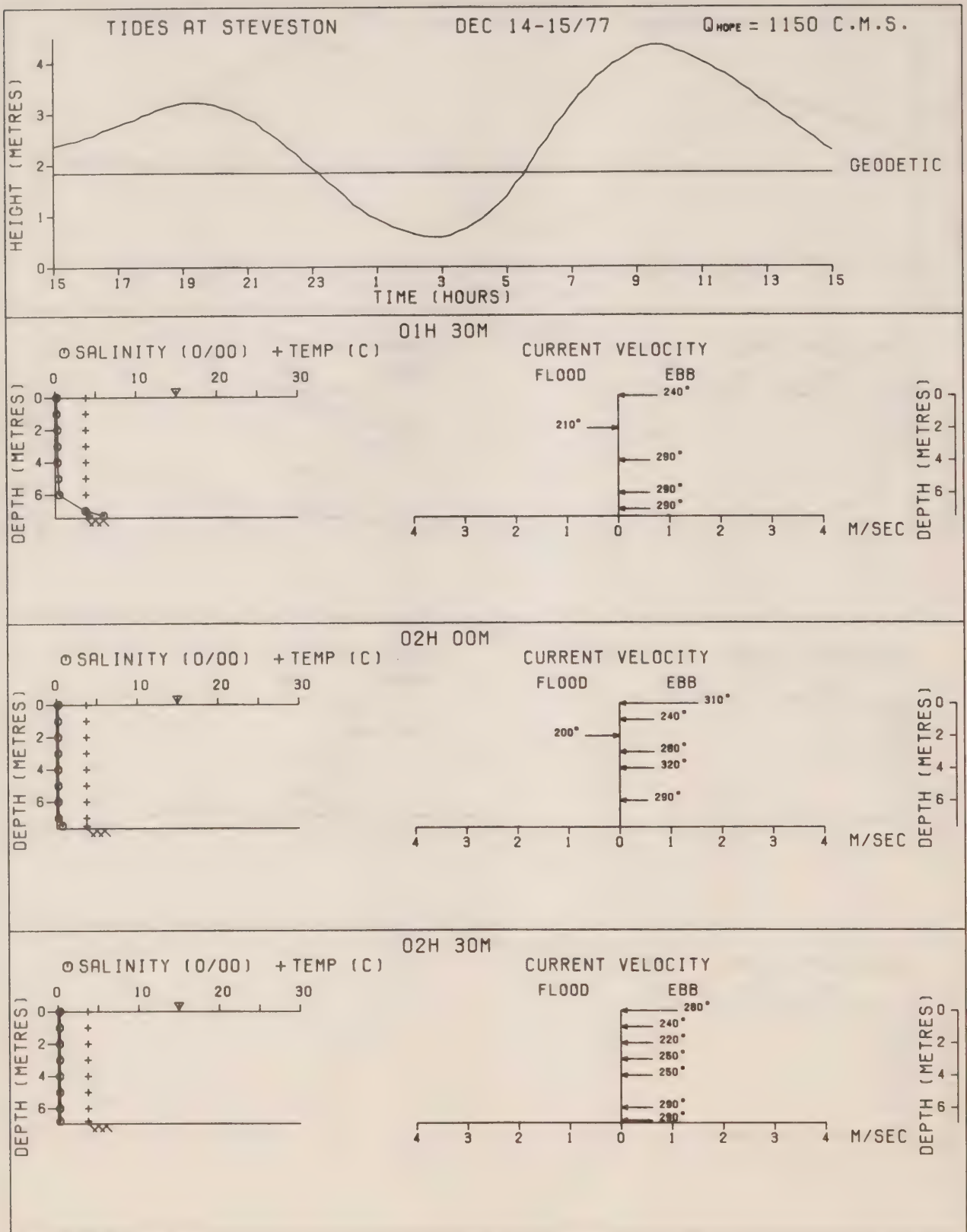




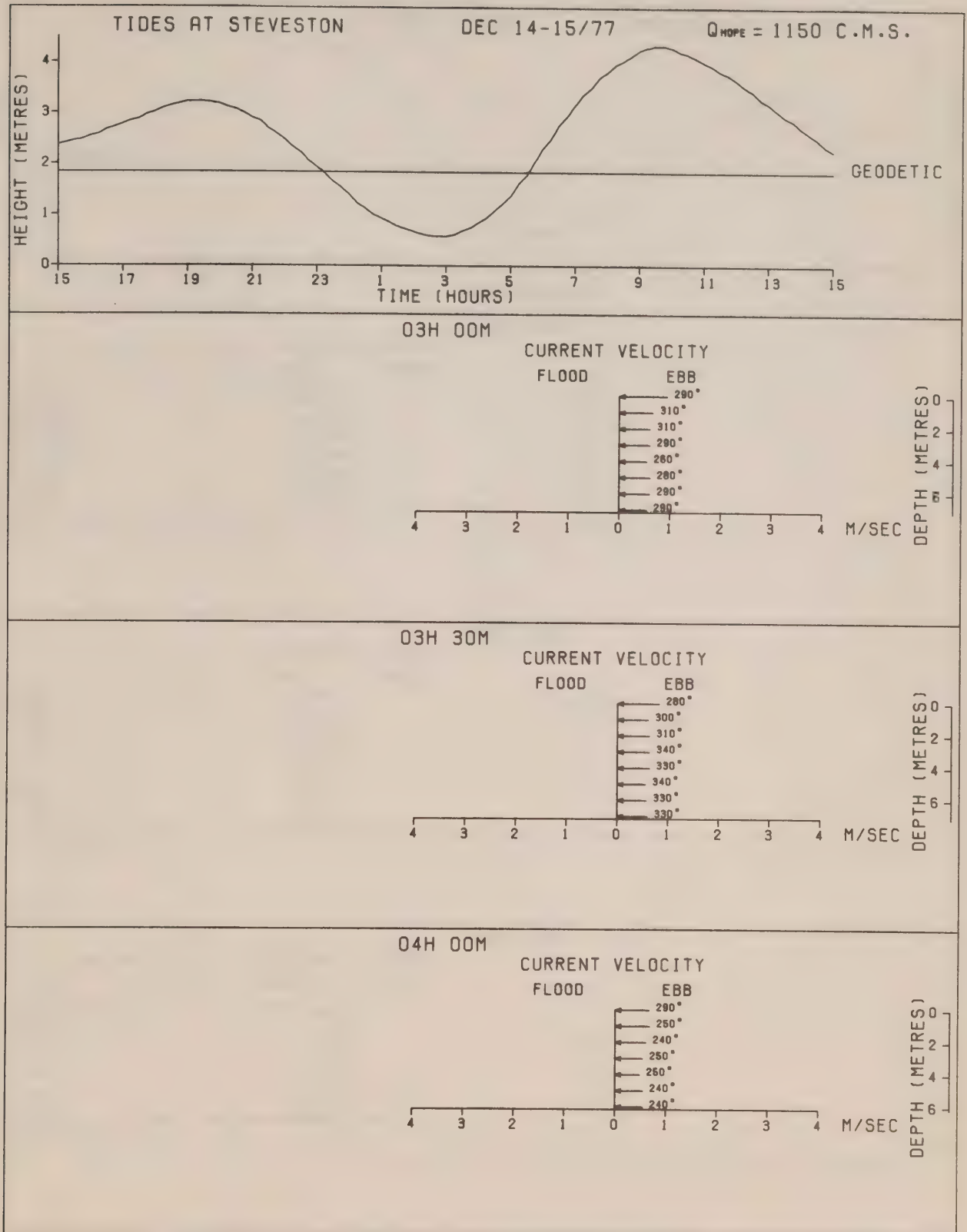
Figure 96

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21



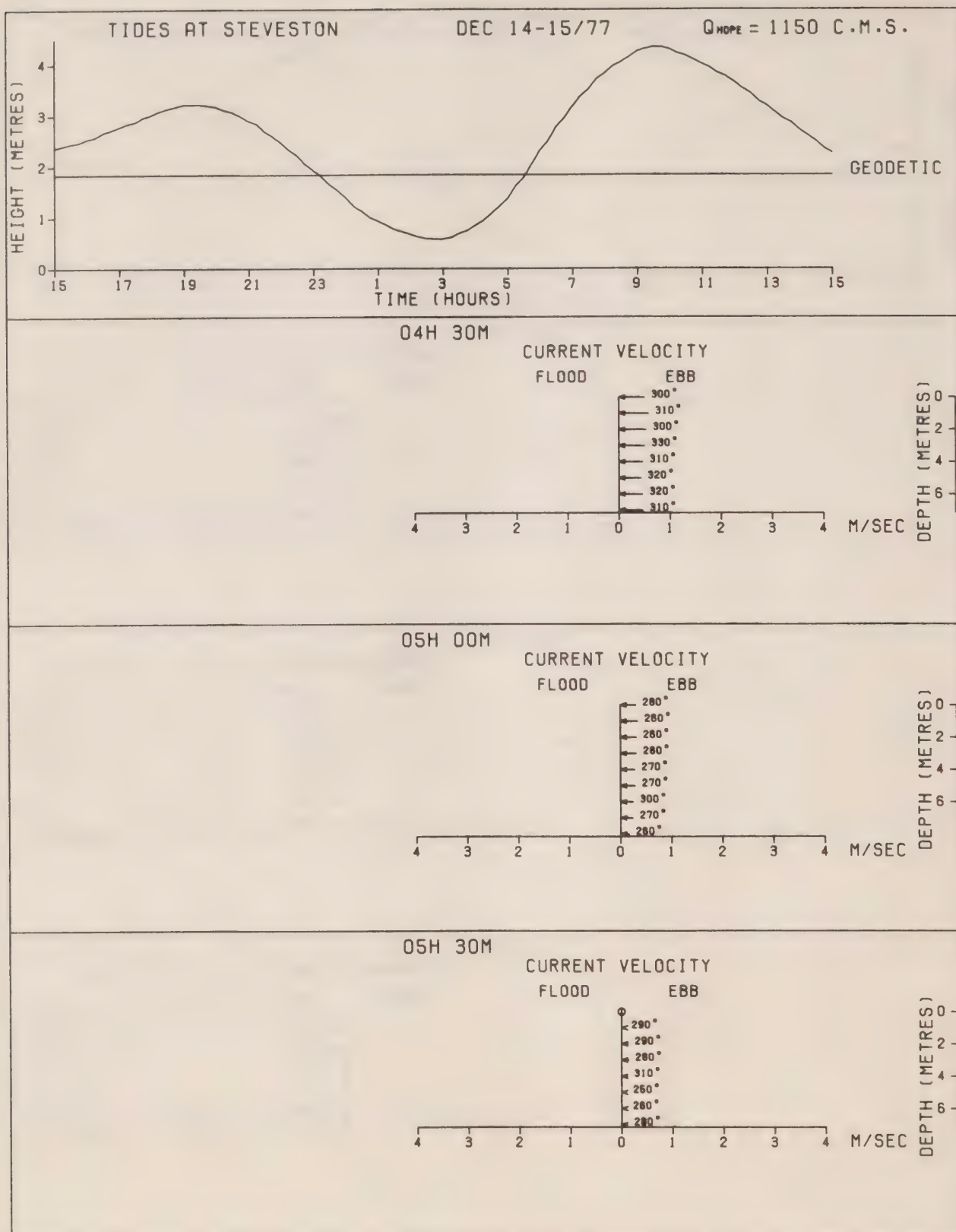
**Figure 97**

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21



**Figure 98**

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21



TIDES AT STEVESTON

DEC 14-15/77

Q<sub>HOPE</sub> = 1150 C.M.S.

HEIGHT (METRES)

TIME (HOURS)

GEODETIC

06H 00M

⊙ SALINITY (0/00) + TEMP (C)

CURRENT VELOCITY

FLOOD EBB

DEPTH (METRES)

DEPTH (METRES)

M/SEC

0 10 20 30

0 2 4 6

0 1 2 3 4

110° 120° 110° 110° 120° 120° 120° 110° 110°

06H 30M

CURRENT VELOCITY

FLOOD EBB

DEPTH (METRES)

DEPTH (METRES)

M/SEC

0 1 2 3 4

0 2 4 6

130° 130° 120° 120° 100° 130°

07H 00M

⊙ SALINITY (0/00) + TEMP (C)

CURRENT VELOCITY

FLOOD EBB

DEPTH (METRES)

DEPTH (METRES)

M/SEC

0 10 20 30

0 2 4 6 8

0 1 2 3 4

100° 100° 110° 110° 110°



Figure 100

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

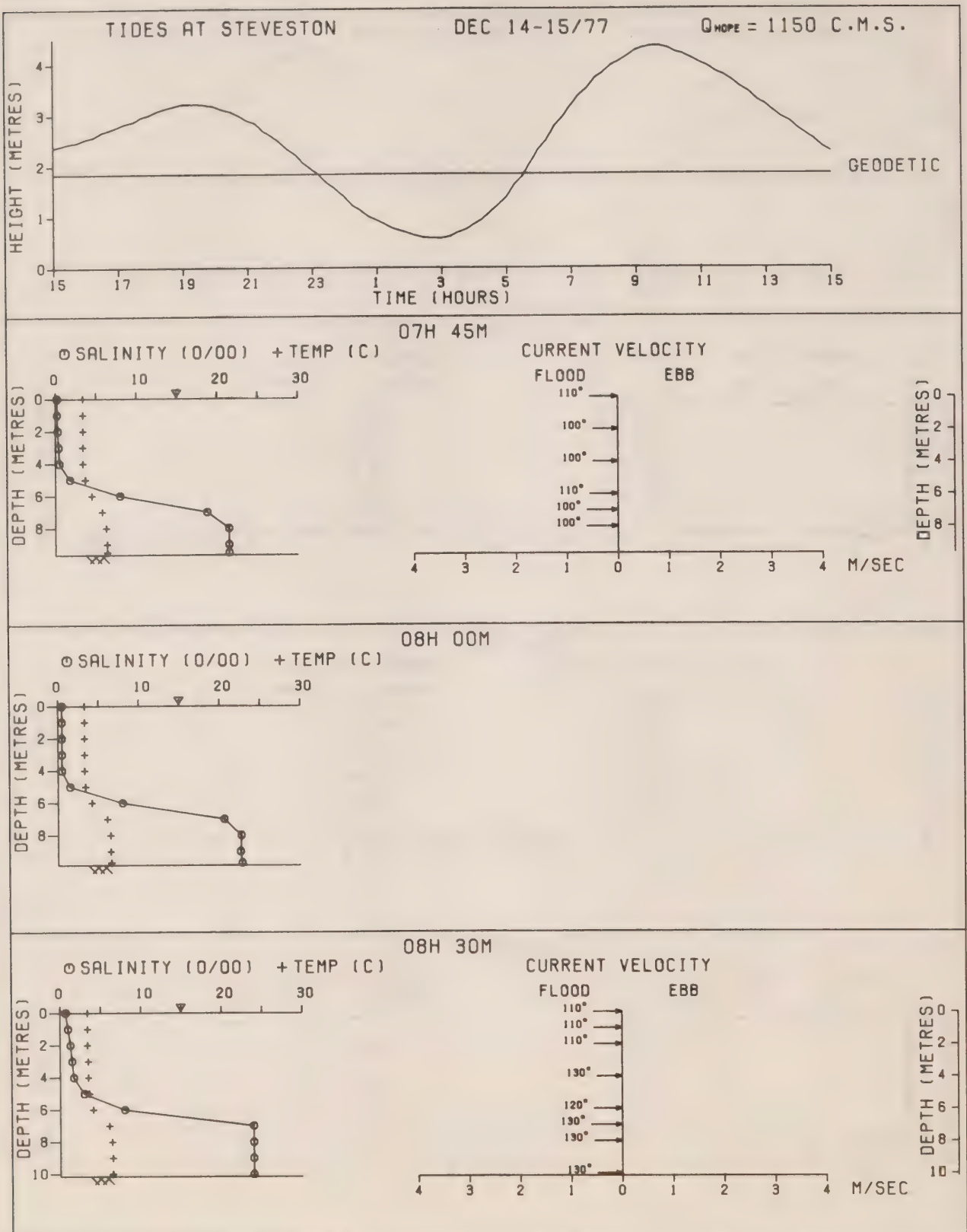


Figure 101

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

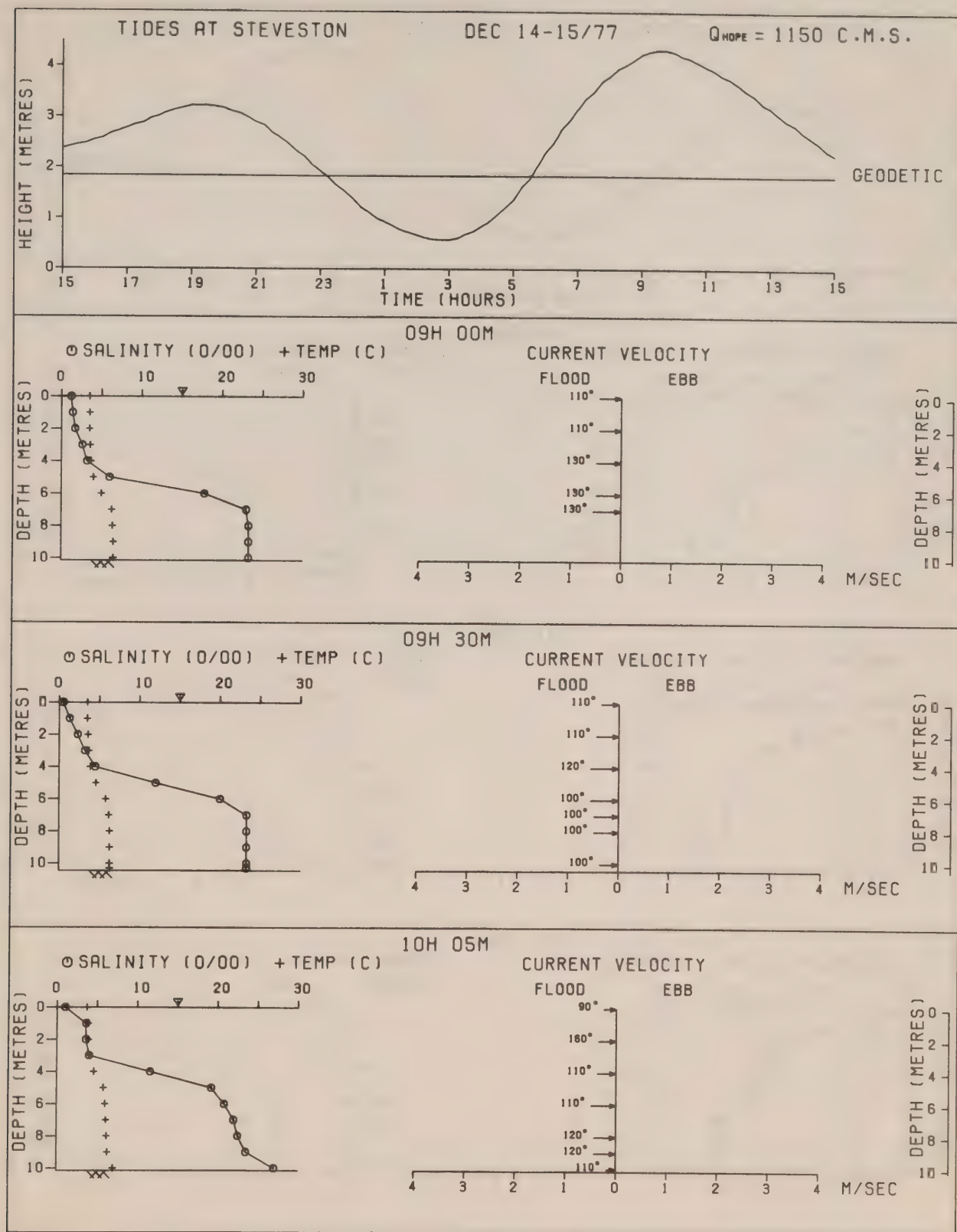


Figure 102

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

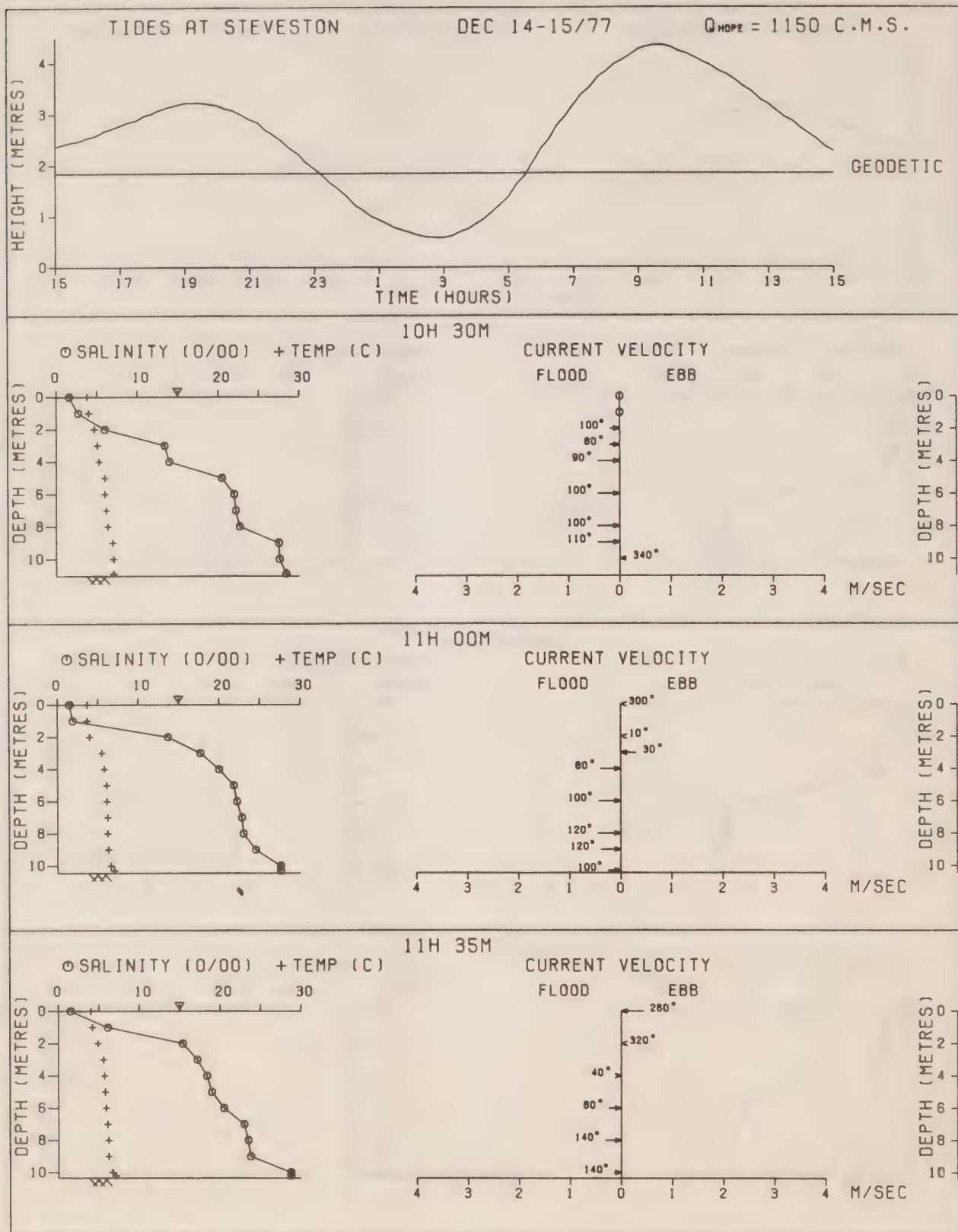


Figure 103

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

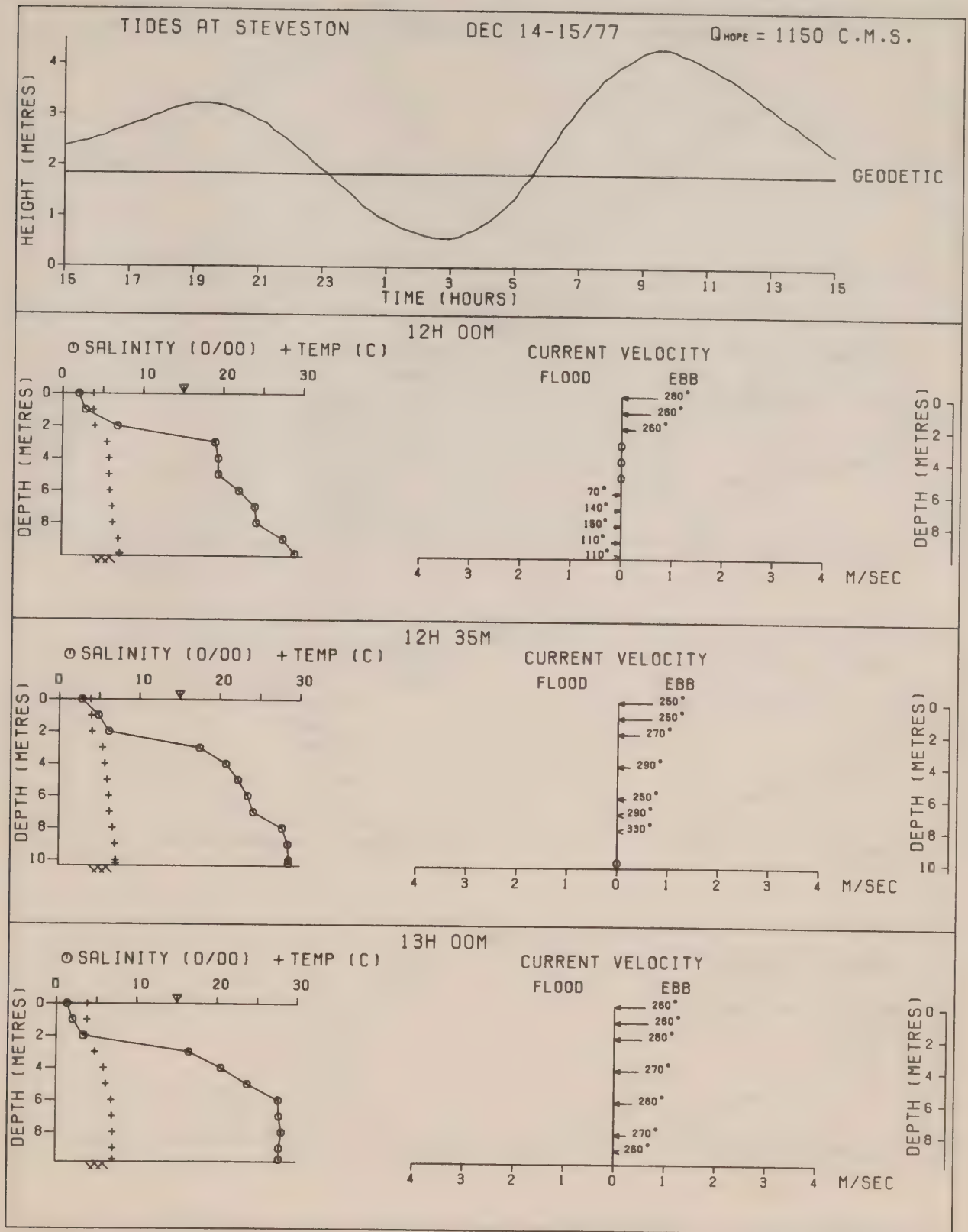




Figure 104

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

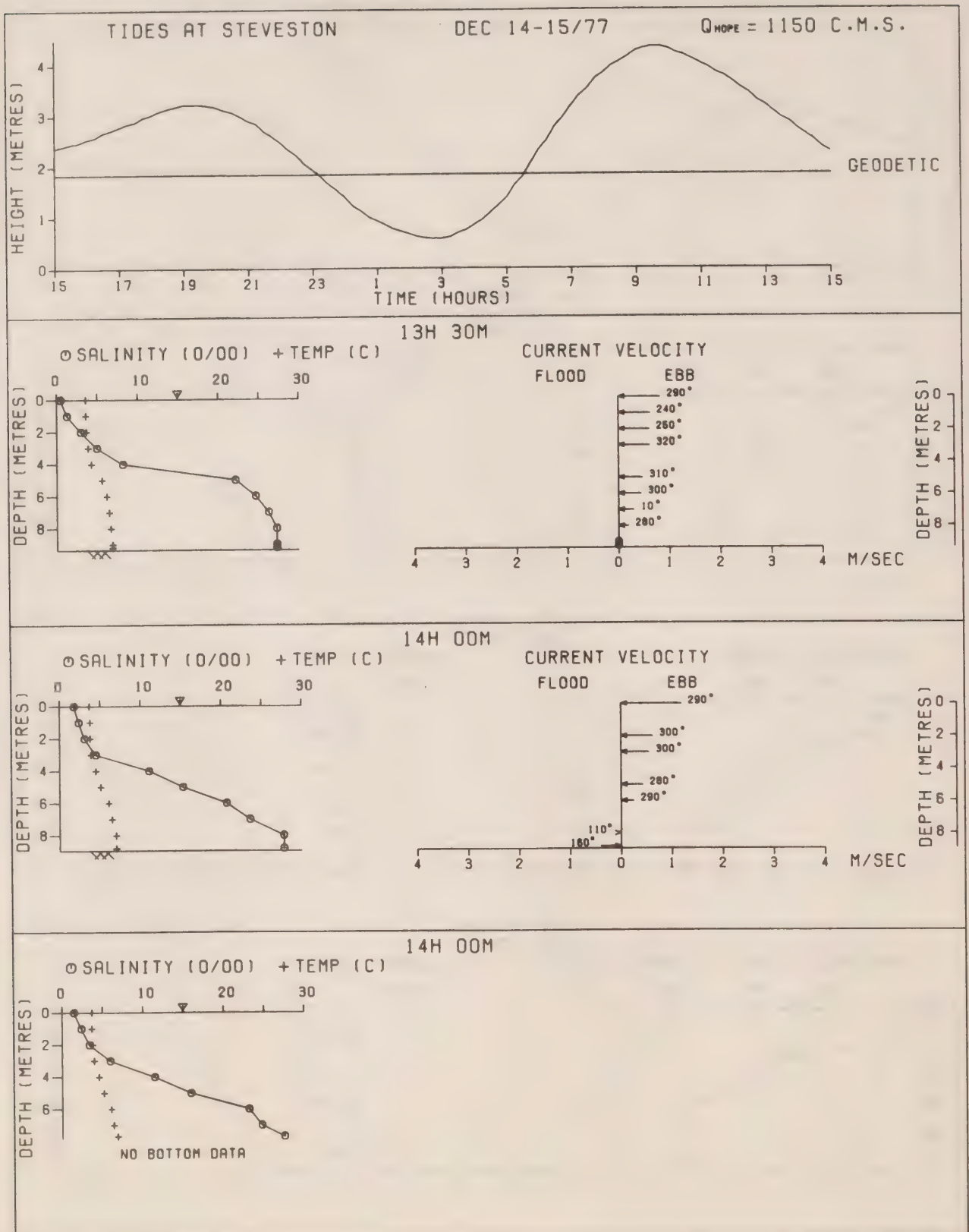


Figure 105

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

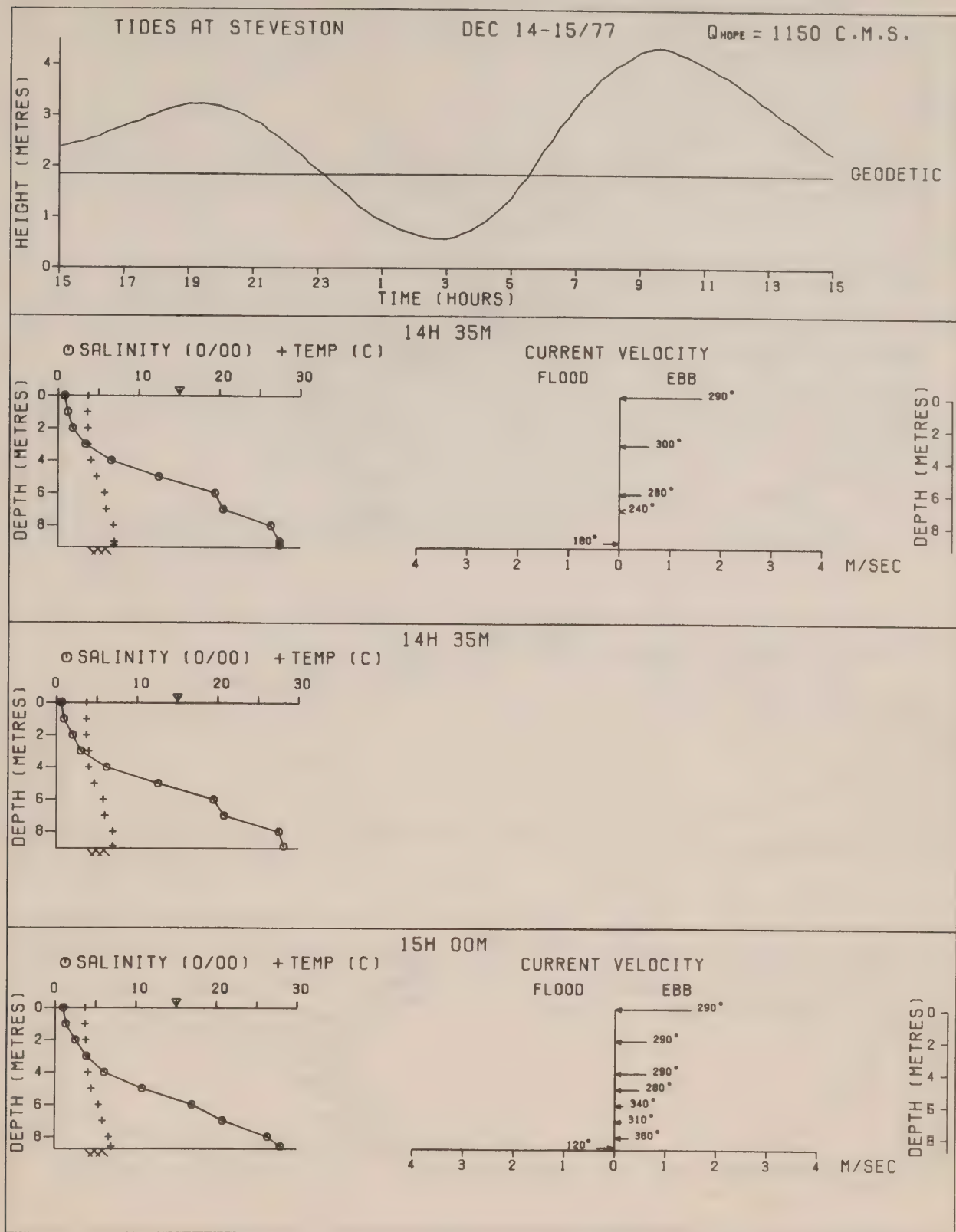


Figure 106

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

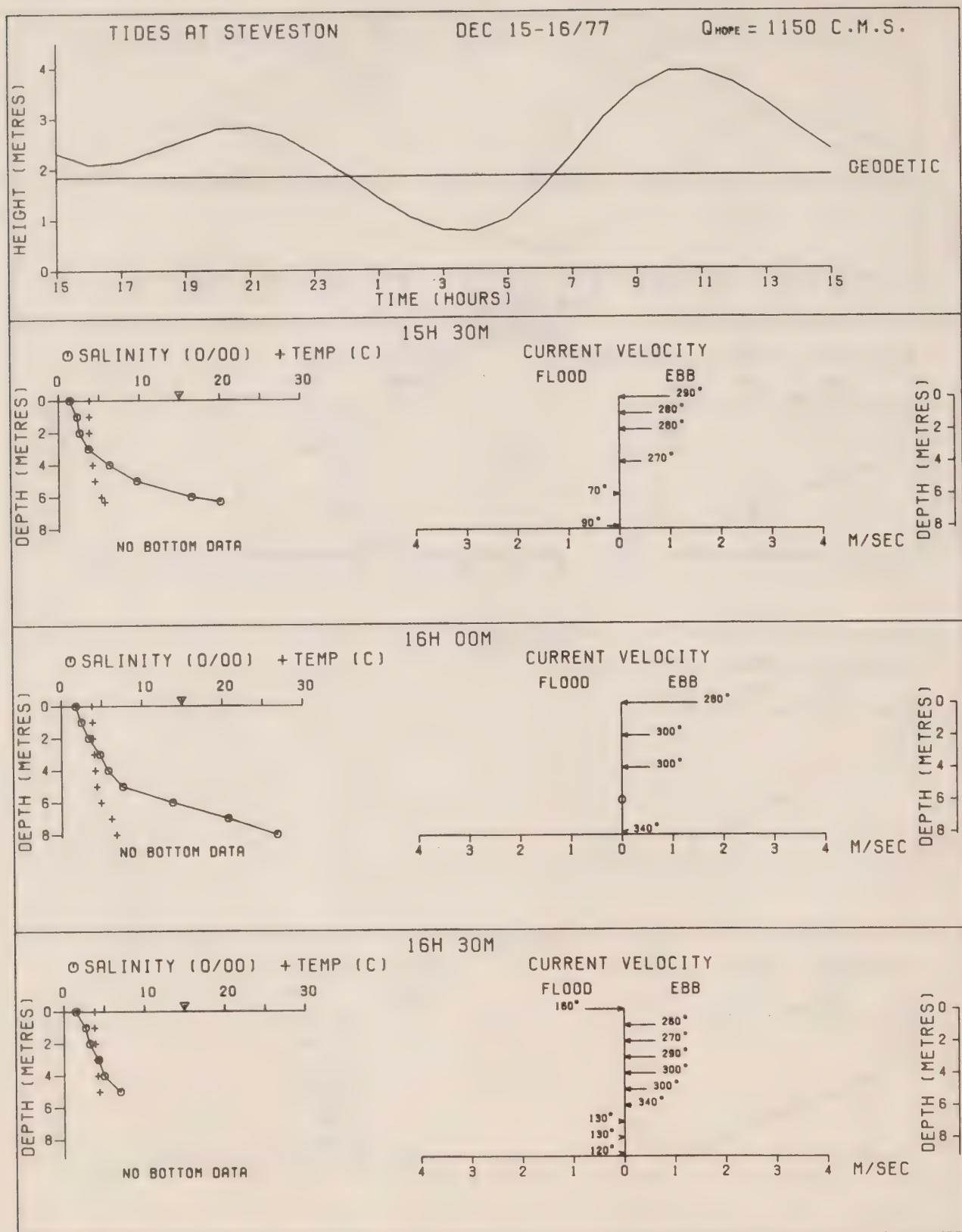


Figure 107

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

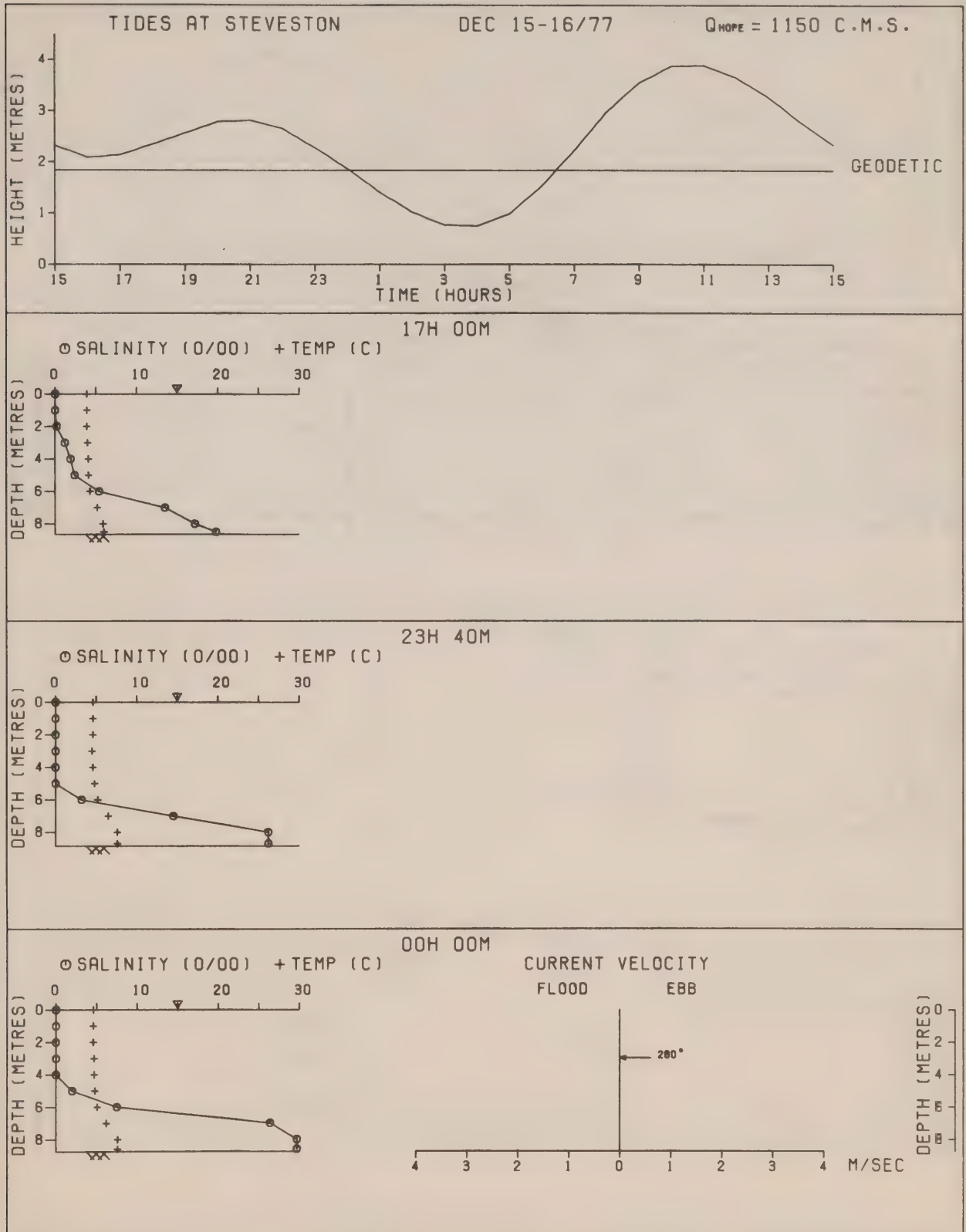




Figure 108

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

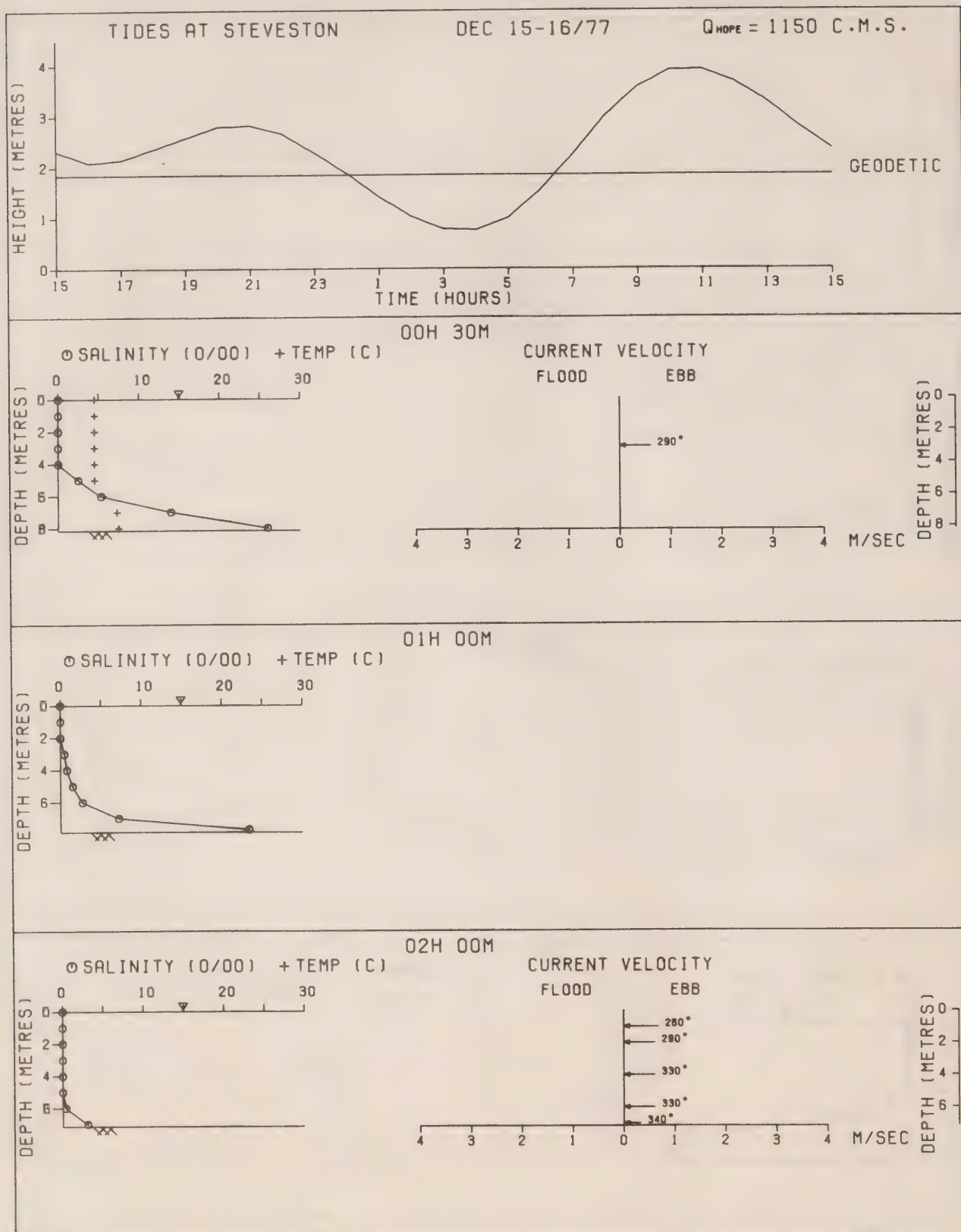


Figure 109

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21

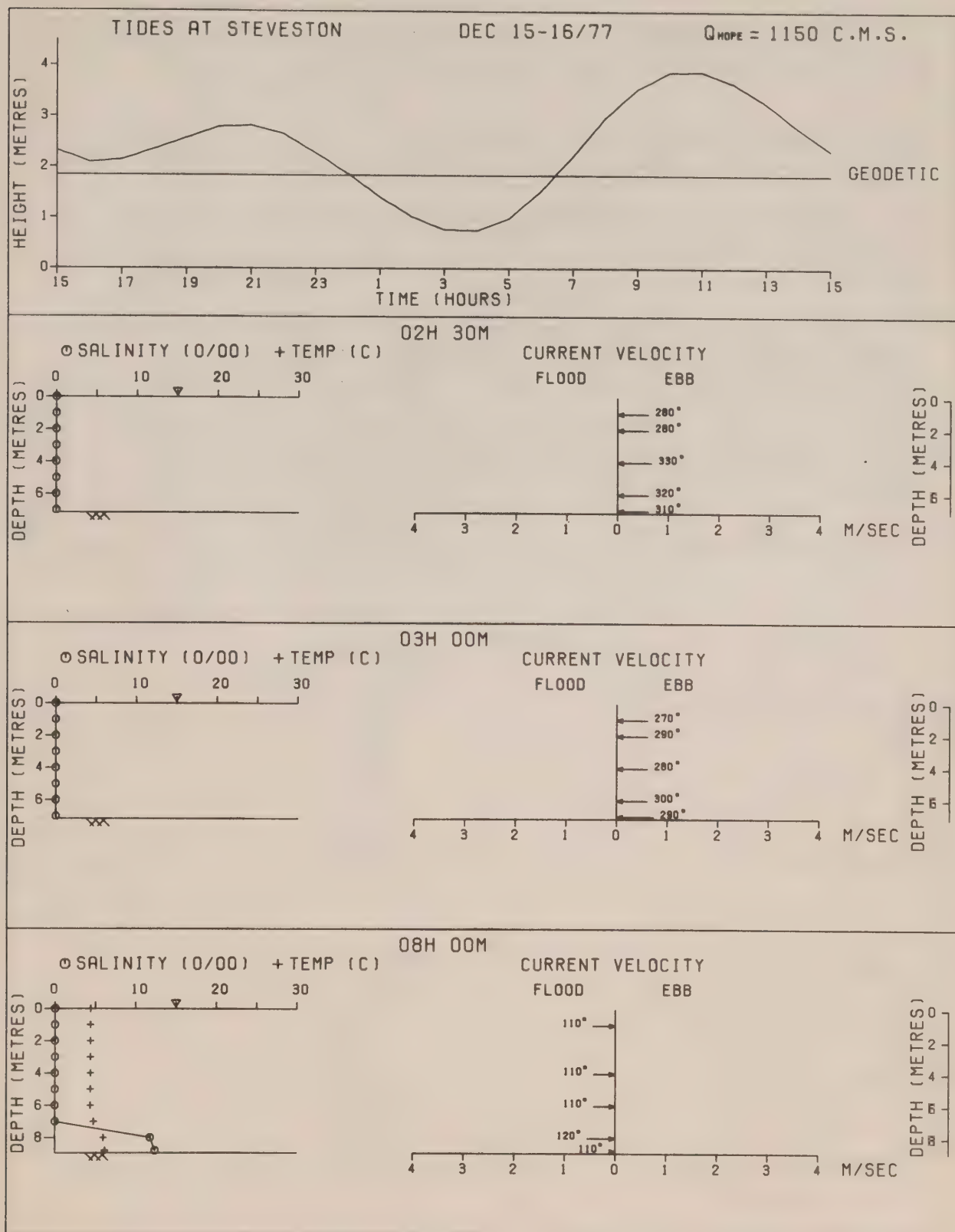
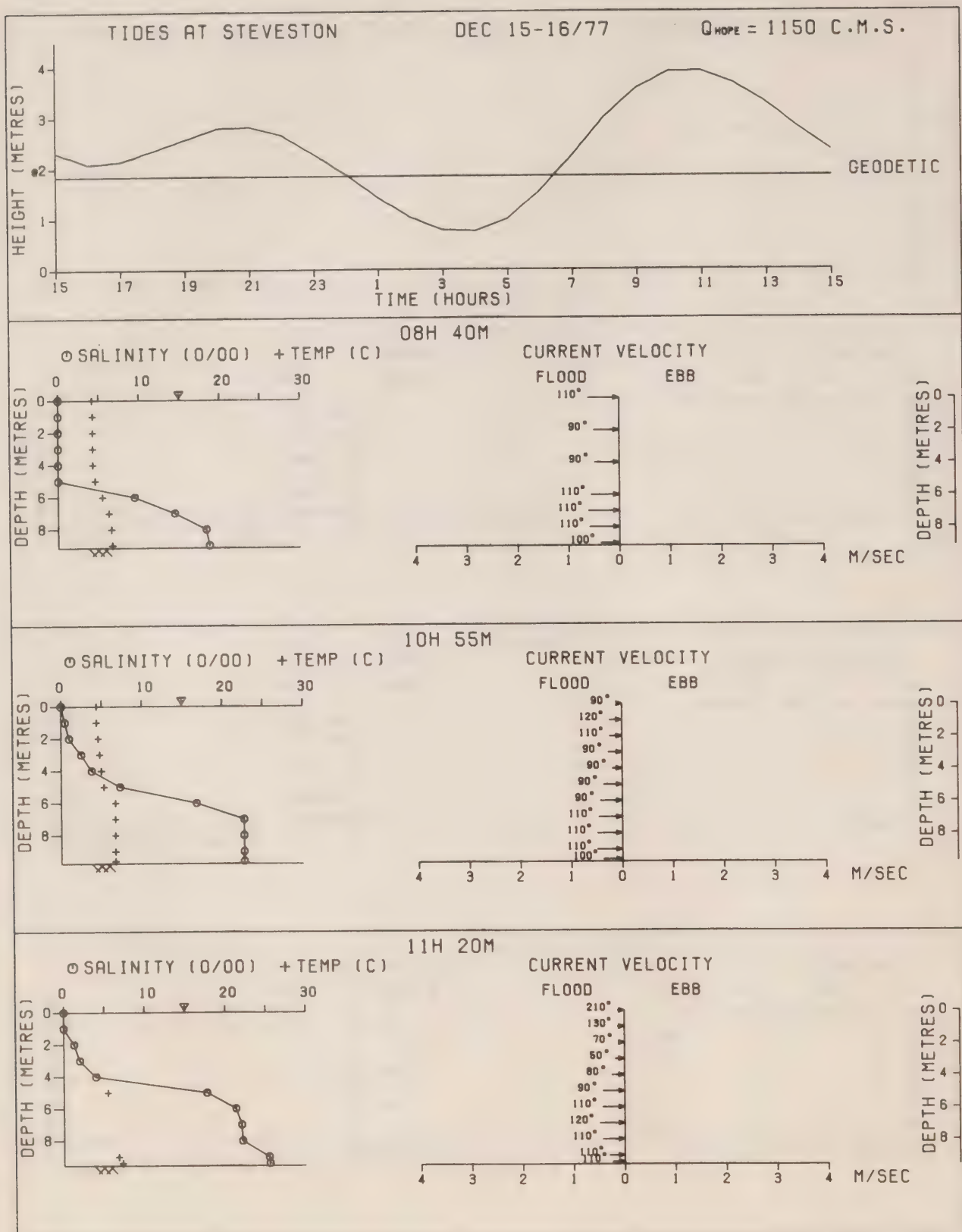


Figure 110

SALINITY, TEMPERATURE, AND CURRENT MEASUREMENTS AT BUOY S21



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